ECM user manual
Emeris Communication Manager

Valid for software version 3.60

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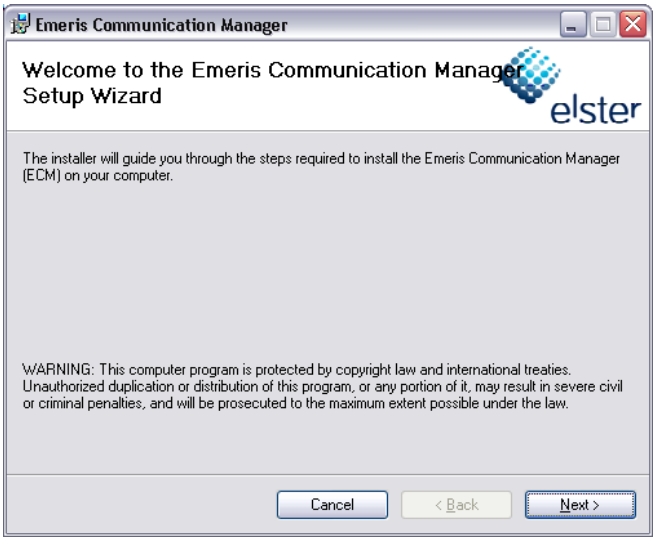
1 Introduction

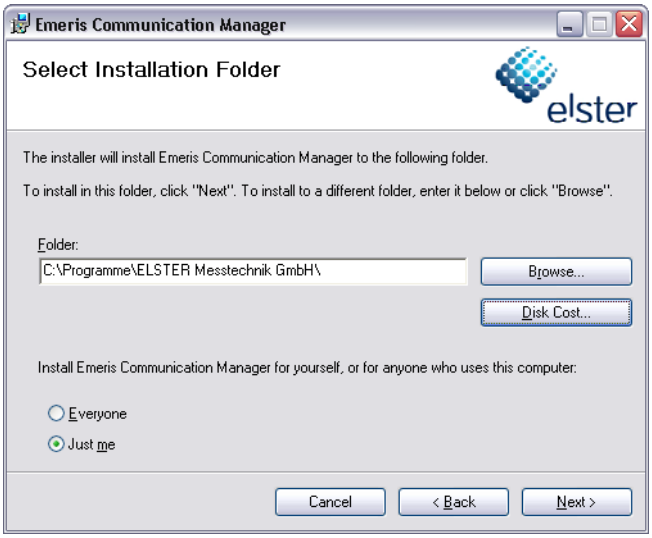
The following manual describes how to install and use the Emeris Communication Manager (ECM) Software in the version 3.51.
Basically the software is divided in the configuration module C and the database module D.
The ECM data can also be transferred to a PDA via Module M and to the Elster Route Manager (ERM). The next chapters explain the most important features, which are relevant for the parameterisation, the read out and the transfer of the meter data.

2 Installation

Put the installation CD in the CD-drive and open the folder ECM. Start the “Setup.exe” file.
Now you can see the following picture on your screen:

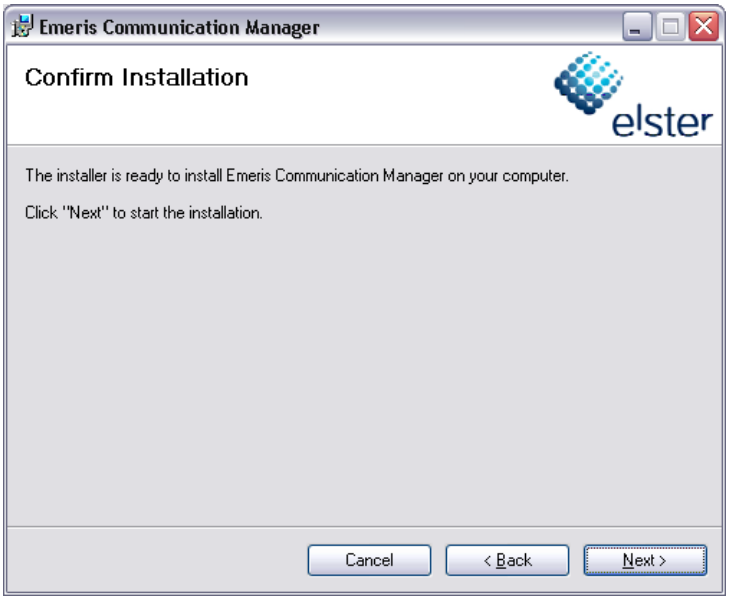

Emeris Communication Manager
Welcome to the Emeris Communication Manager Setup Wizard
elster
The installer will guide you through the steps required to install the Emeris Communication Manager (ECM) on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >

Choose NEXT.

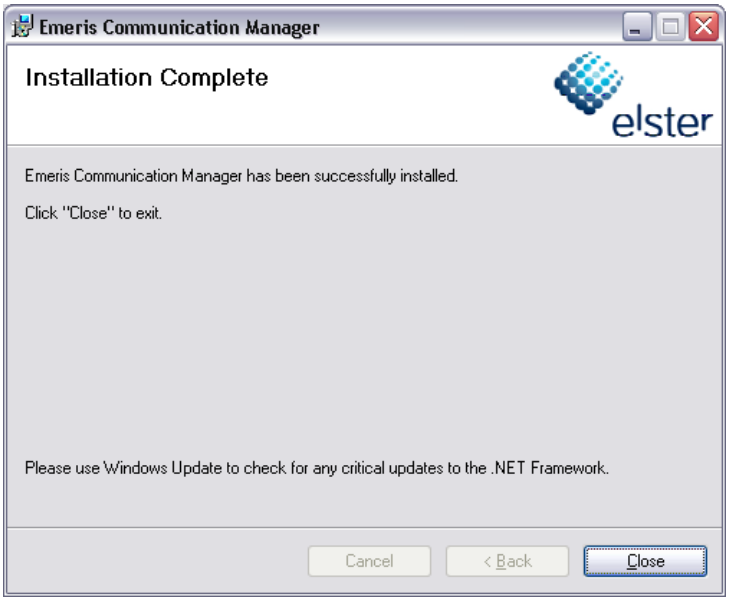

Emeris Communication Manager
Select Installation Folder
elster
The installer will install Emeris Communication Manager to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Programme\ELSTER Messtechnik GmbH\
Browse...
Disk Cost...
Install Emeris Communication Manager for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >

Select the path where you want to install the ECM Software.

Set the radio button on “Just me” if you want to be the only user who is able to run the program. If you choose “Everyone”, all Users on this PC can use the program.
Afterwards click NEXT.


Emeris Communication Manager
Confirm Installation
elster
The installer is ready to install Emeris Communication Manager on your computer.
Click "Next" to start the installation.
Cancel
< Back
Next >

You confirmed all necessary data. To start the installation click NEXT.



After finishing the installation you see the window INSTALLATION COMPLETE.
The installation was successful and a shortcut was created at your desktop.
Start the program with a double click on the ECM short cut.

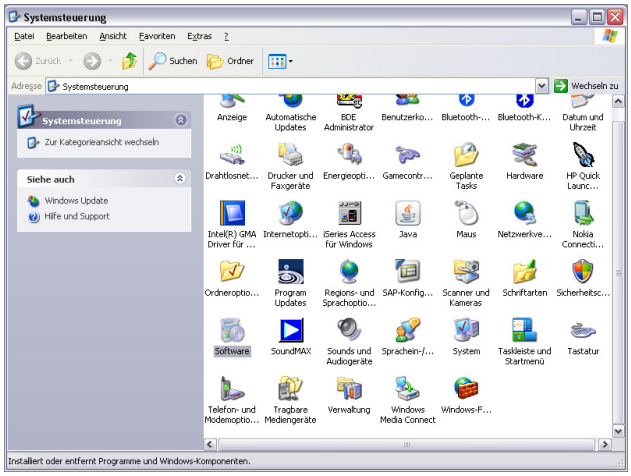
Installation under Windows Vista:

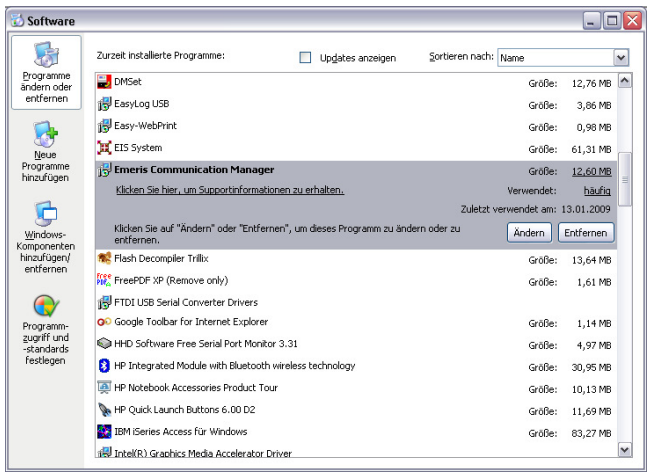
If you use windows vista as operating system on your PC, there might be some problems with the user rights.
After the installation of the Emeris Communication Manager (ECM) on a Windows Vista PC the following steps has to be done manually:

- Launch C:\Windows\RegEdit.exe
- Create "*HKey_Local_Machine* \ *Software* \ *ELSTER Messtechnik GmbH*"
- Right click on "*ELSTER Messtechnik GmbH*" and select Rights / User / full access
- Create "*HKey_Local_Machine* \ *Software* \ *MTec*"
- Right click on "MTec" and select Rights / User / full access
- Launch "Windows Explorer" and make a right click on C:\Program files\Emeris Communication Manager". Select "Properties" and then "Security / User / Advanced"
- Click on "User / Edit"
- In the next window click again on "User / Edit"
- Select "Full access" and close the window with "OK"
- Close the other 3 open windows also with "OK"

2.1 Install an update

To install a new version of the ECM software be sure that you de-install the old version first. If you de-install your old version all of your custom data, like data base entries and meter readings, is still stored on your PC.
To delete the software follow these steps:
Open the menu “Software” by clicking “Start” → “Settings” → “control panel”
Double-click the folder “Software” and choose the entry “Emeris Communication Manager”

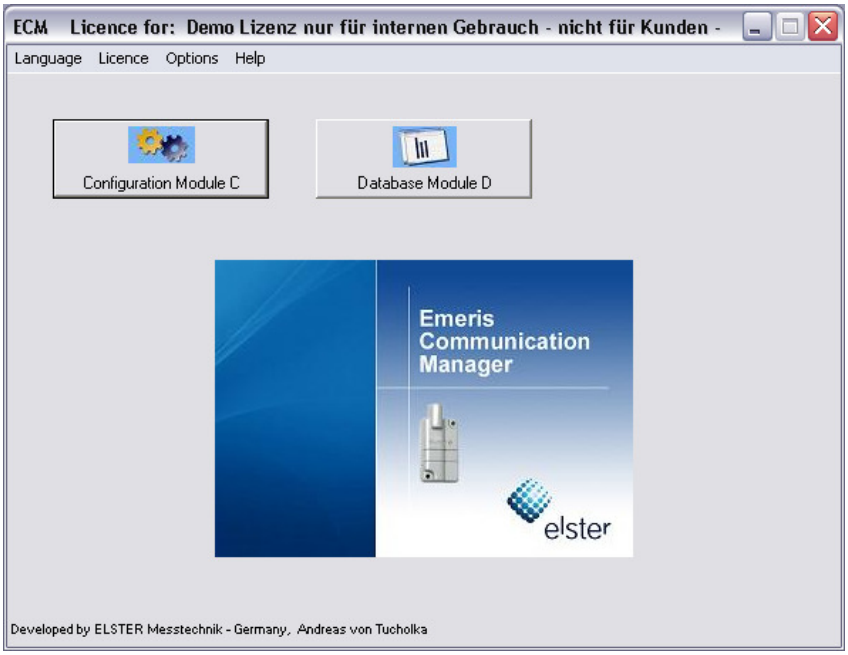



Software
Programme ändern oder entfernen
Neue Programme hinzufügen
Windows-Komponenten hinzufügen/ entfernen
Programm-zugriff und -standards festlegen
Zurzeit installierte Programme:
Updates anzeigen
Sortieren nach: Name
DMSet Größe: 12,76 MB
EasyLog USB Größe: 3,86 MB
Easy-WebPrint Größe: 0,98 MB
EIS System Größe: 61,31 MB
Emeris Communication Manager Größe: 12,60 MB
Klicken Sie hier, um Supportinformationen zu erhalten.
Verwendet: häufig
Zuletzt verwendet am: 13.01.2009
Klicken Sie auf "Ändern" oder "Entfernen", um dieses Programm zu ändern oder zu entfernen.
Ändern Entfernen
Flash Decompiler Trillix Größe: 13,64 MB
FreePDF XP (Remove only) Größe: 1,61 MB
FTDI USB Serial Converter Drivers
Google Toolbar for Internet Explorer Größe: 1,14 MB
HHD Software Free Serial Port Monitor 3.31 Größe: 4,97 MB
HP Integrated Module with Bluetooth wireless technology Größe: 30,95 MB
HP Notebook Accessories Product Tour Größe: 10,13 MB
HP Quick Launch Buttons 6.00 D2 Größe: 11,69 MB
IBM iSeries Access für Windows Größe: 83,27 MB
Intel(R) Graphics Media Accelerator Driver

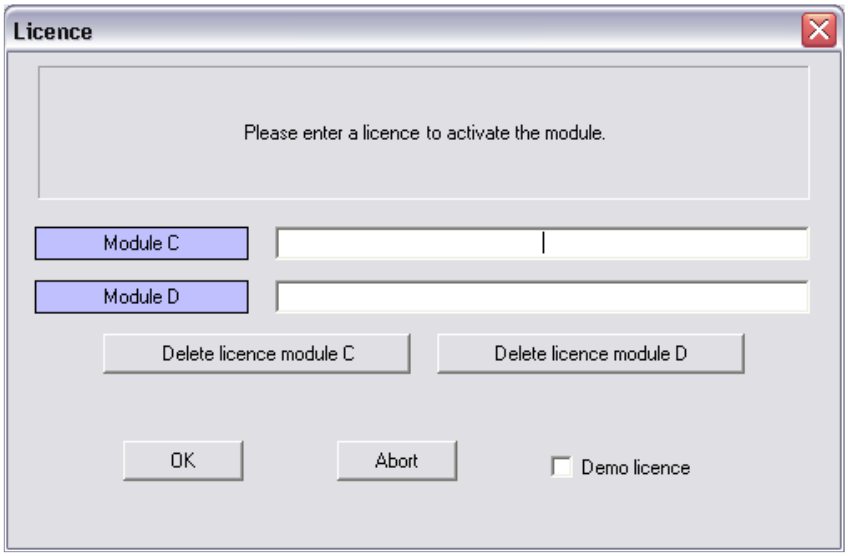
Now click the button „Delete“ and follow the orders on your screen
To install the new ECM version follow the descriptions in Point 2 in this manual.

3 Program

After the double click on the ECM short cut you can see the following image on your screen:


ECM Licence for: Demo Lizenz nur für internen Gebrauch - nicht für Kunden -
Language Licence Options Help
Configuration Module C
Database Module D
Emeris
Communication
Manager
elster
Developed by ELSTER Messtechnik - Germany, Andreas von Tucholka

Click on the tab LICENCE and then SET LICENCE.

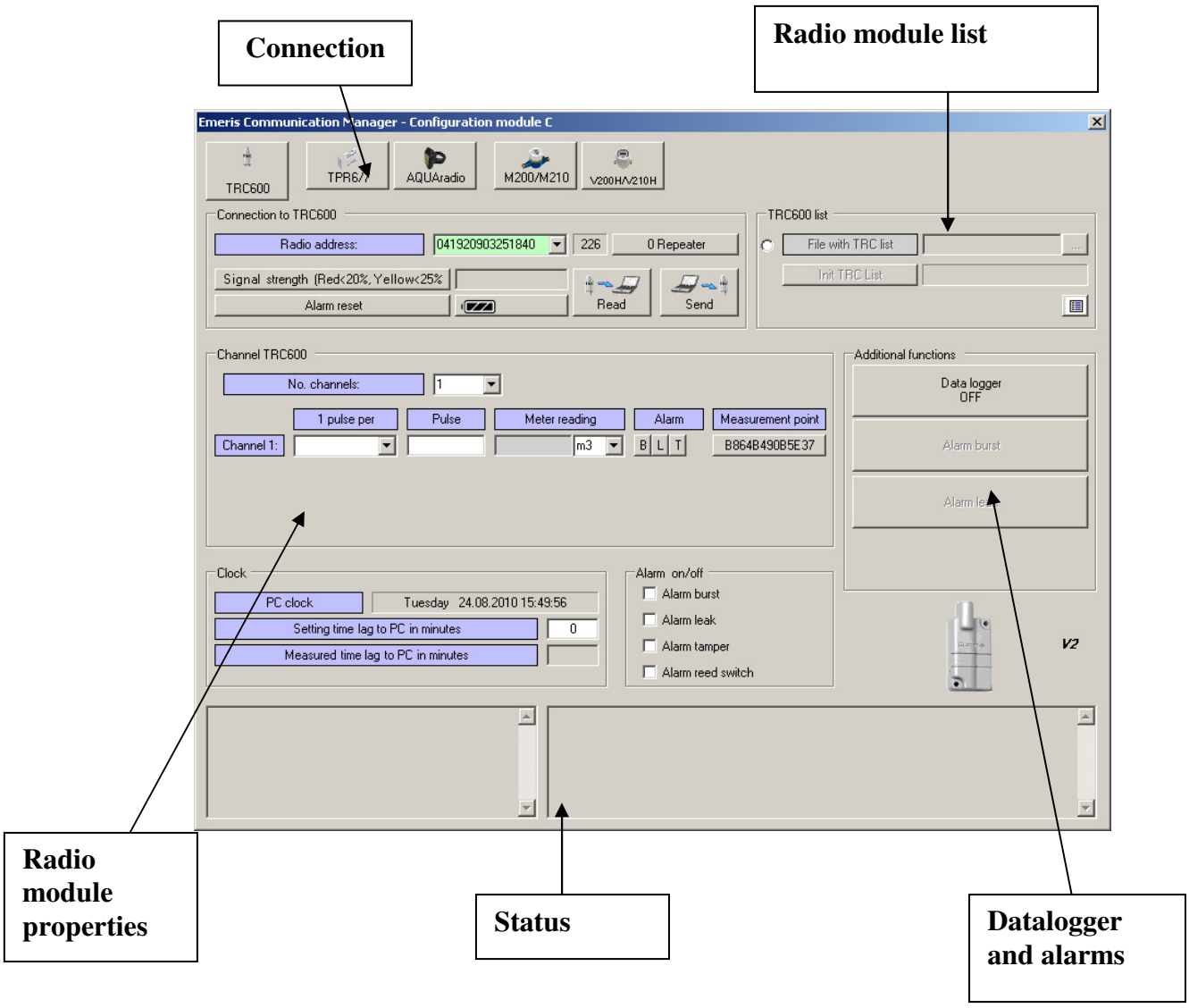


To use the software please enter your registration code for module C and / or module D.
To use the demo version check the Demo License box and press OK.
Now you can use the software.

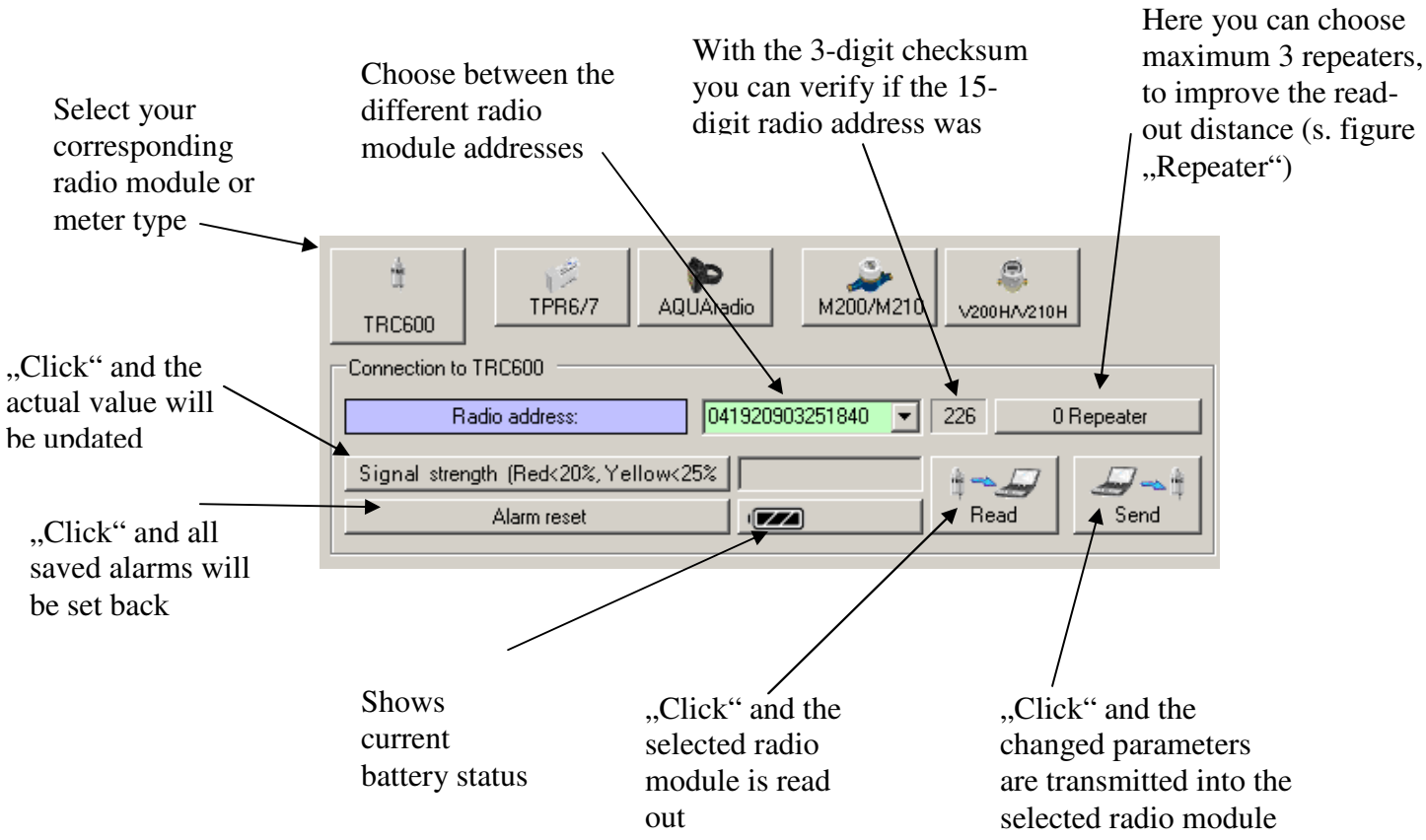
4 Use of the modules

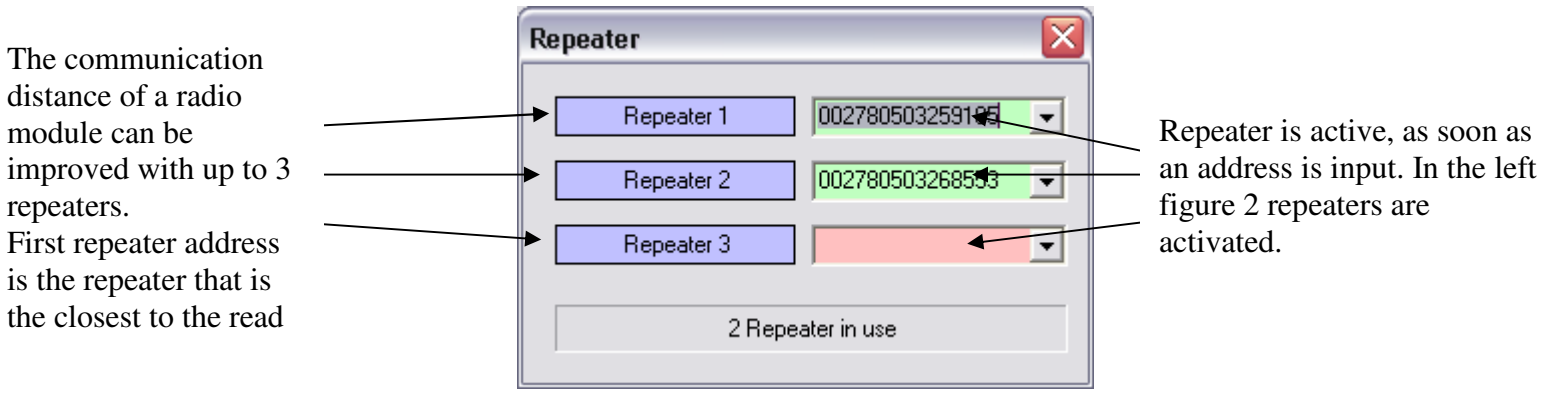
4.1 Module C

To start Module C, press the „Configuration Module C" button.
You use Module C to parameterise the TRC 600 radio module or other radio equipped meters / modules (M200 / M210, Falcon, AQUA radio, V200H / V210H) . First connect the TRC 604 radio modem and choose the related COM Port via the selection box in the upper left of Module C.
To communicate with a radio module enter the 15-digit radio address in the available address field. The last 3-digits on the radio module are a checksum, to control if the address is correct.
It's also possible to load a TRC list file. First activate the radio button "File with TRC list" and choose the path of the list file. Then, the address field just contains the radio modules from the list file.
When you chose the address of a radio module, click on the button "Read". The radio module data is now available.
The following image shows the form of Module C:



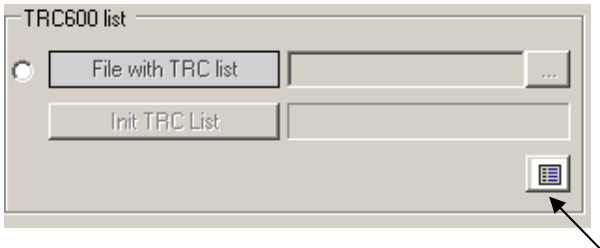
4.1.1 Connection


Select your corresponding radio module or meter type
Choose between the different radio module addresses
With the 3-digit checksum you can verify if the 15-digit radio address was
Here you can choose maximum 3 repeaters, to improve the read-out distance (s. figure „Repeater“)
TRC600
TPR6/7
AQUAradio
M200/M210
V200H/V210H
Connection to TRC600
Radio address:
041920903251840
226
0 Repeater
Signal strength (Red<20%, Yellow<25%
Alarm reset
Read
Send
„Click“ and the actual value will be updated
„Click“ and all saved alarms will be set back
Shows current battery status
„Click“ and the selected radio module is read out
„Click“ and the changed parameters are transmitted into the selected radio module


The communication distance of a radio module can be improved with up to 3 repeaters.
First repeater address is the repeater that is the closest to the read
Repeater
Repeater 1
Repeater 2
Repeater 3
2 Repeater in use
Repeater is active, as soon as an address is input. In the left figure 2 repeaters are activated.

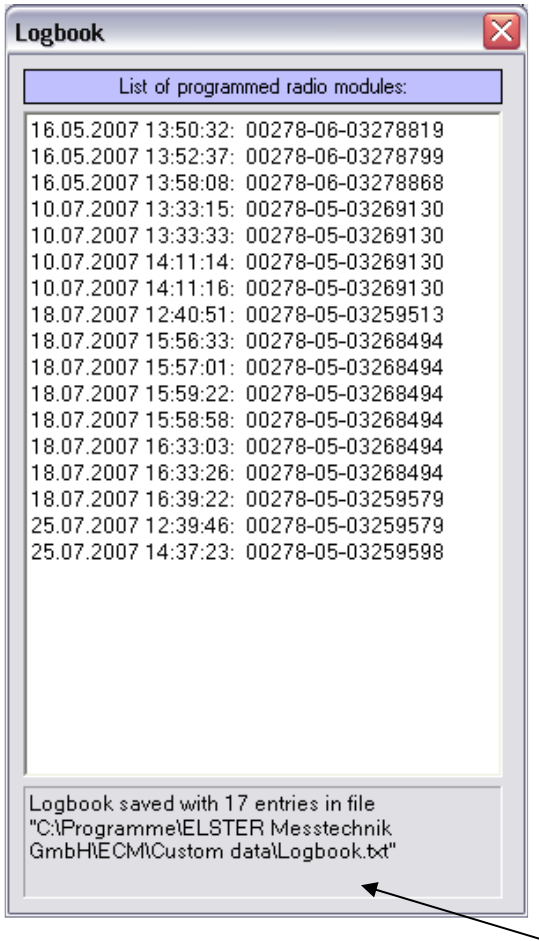
4.1.2 Radio module search and list

You can load a radio module list (*.txt) that contains your radio module addresses.



By „click“ you see a logbook (s. figure „Logbook“) with information about the time and date when the parameters of a radio module were changed

List contains time stamps and radio addresses. Informs when and which radio module was parameterised or settings were.



File path where the log data is saved on the PC

4.1.3 Radio module properties

Number of pulses. Can be parameterised

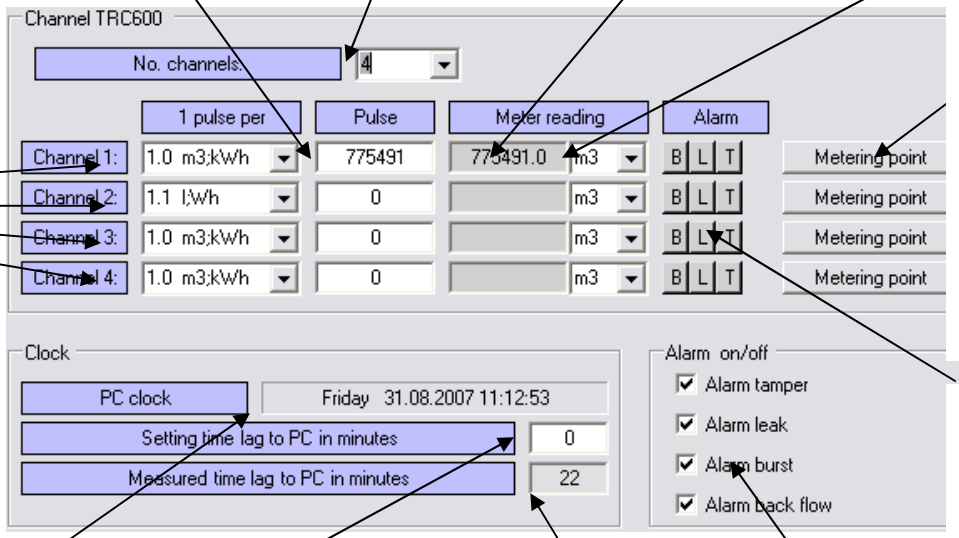
Number of channels the radio module got. Attention: Don't set a 2-channel radio module to 3 or 4 channel mode!

Current meter reading. When you install the radio module adopt the meter reading to the radio module

The unit of the meter reading

Starts „Database Module D" and shows the corresponding entry to the radio module and the channel. If no entry is available a new one is created.

Setting of the pulse value of each channel



Information about the status of the alarm functions of each channel.
B: Burst alarm
L: Leak alarm

Time and date value from the intern PC-clock

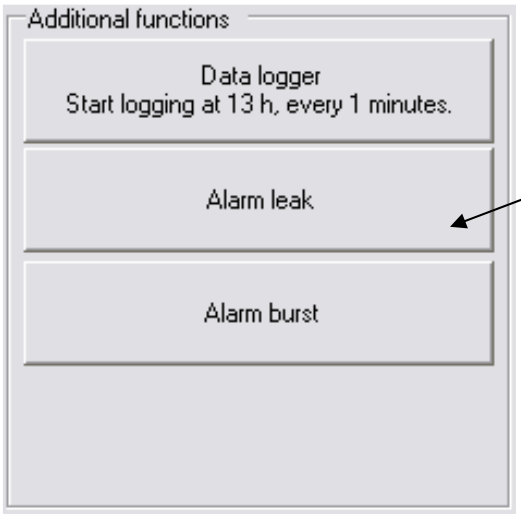
Time deviation of the radio module to the PC-clock can be set

Actual time deviation of the radio module (compared to the PC-clock)

Activates or deactivates the alarm functions. The parameterisation happens in „Additional

4.1.4 Datalogger and alarms

Data logger function (s. fig. DataLog)

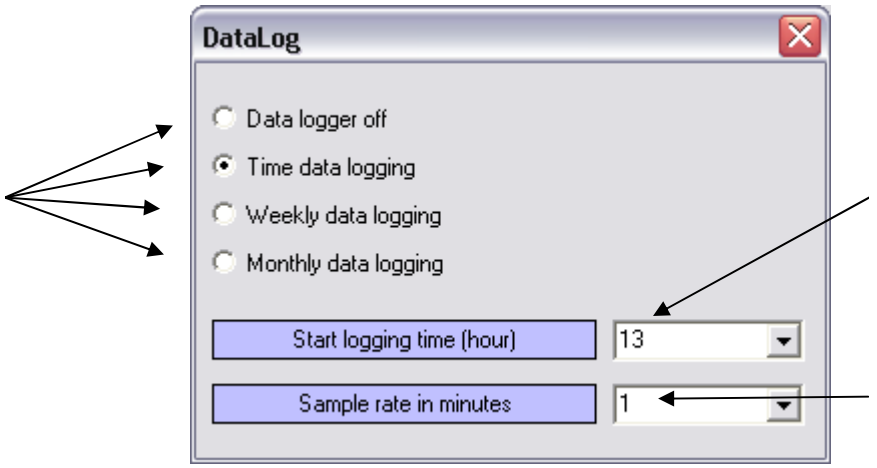


Leak alarm function (s. fig. Leak alarm)

Burst alarm function (s. fig. Burst alarm)

4.1.5 Data logger

Choose if and in what time interval the data logger stores the meter readings.
Attention:
Radio module can store up to 12 meter readings for each channel. If you use just one channel, 24 meter readings can be stored



Define the start-/ store time of the data logger function

Shows when and how often a meter reading is stored

Attention: If the data logger is already activated and you want to change the logging period, first deactivate the data logger!
The submitted radio protocol is as short as possible to assure a long battery life time. For this reason only the last data logger value got a time stamp. If you now just change the logger interval the old values are wrong interpreted and the history gets useless.
By deactivating the data logger all recent logger values are **erased** automatically.

Explanation how to change the logger period:

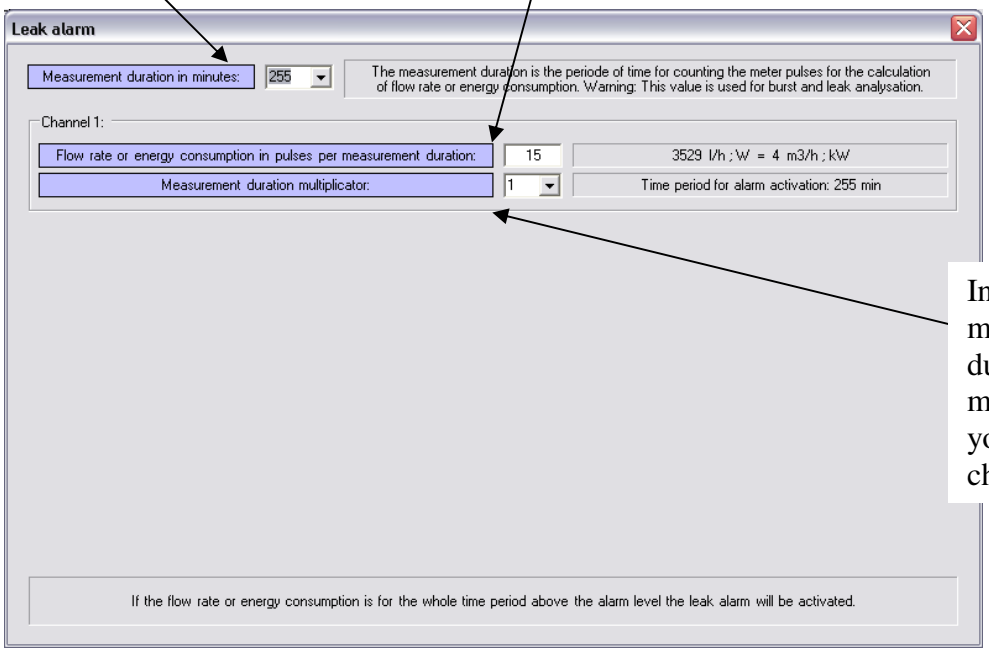
Read radio module (data logger values are stored in the history in Module D) → Turn data logger off → write the changed values into the radio module ("Write" button) → reactivate the data logger with the new intervals → write the changed values into the radio module ("Write" button) again

Note: The data logger is automatically **deactivated** by changing the time in the radio module

4.1.6 Leak alarm

Duration, when the threshold of the flow rate must be exceeded to release the alarm.
Max. 255 minutes, parameterise bigger values with the multiplicator.
Attention: The duration time applies

The threshold (in pulses) shows what flow, in the set duration time, causes an alarm


Leak alarm
Measurement duration in minutes:
255
The measurement duration is the periode of time for counting the meter pulses for the calculation of flow rate or energy consumption. Warning: This value is used for burst and leak analysation.
Channel 1:
Flow rate or energy consumption in pulses per measurement duration:
15
3529 l/h ; W = 4 m3/h ; kW
Measurement duration multiplicator:
1
Time period for alarm activation: 255 min
If the flow rate or energy consumption is for the whole time period above the alarm level the leak alarm will be activated.

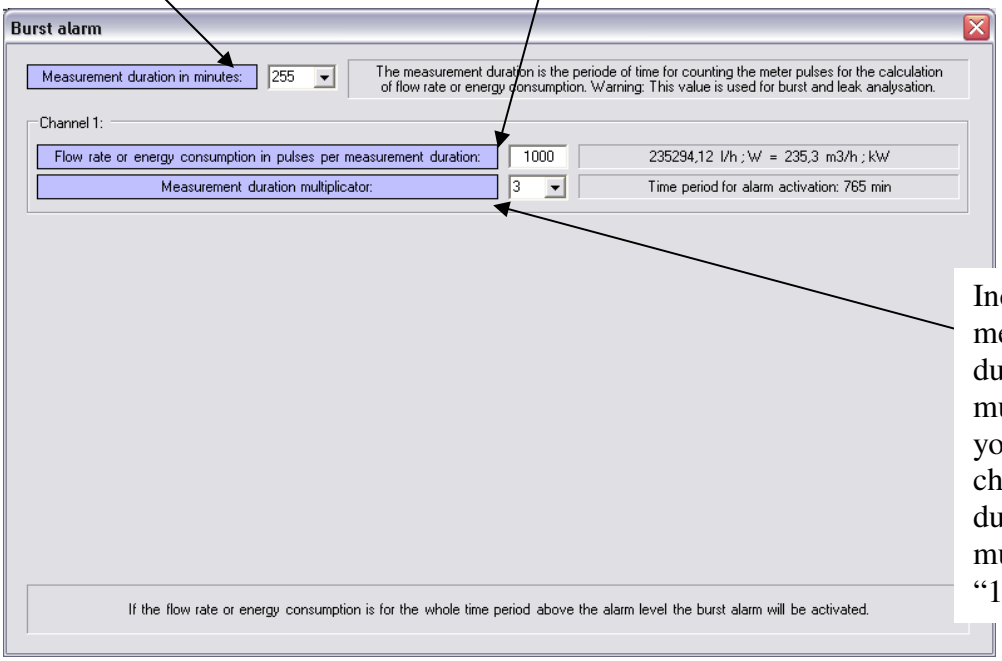
Parameterisation for channel 1. If more channels are activated they can be parameterised, too.

Increase the measurement duration via the multiplicator. If you don't want to change the

4.1.7 Burst alarm

The duration is the timer when the threshold of the flow rate must be exceeded to release the alarm.
Max. 255 minutes, parameterise bigger values with the multiplicator.
Attention: The duration time applies

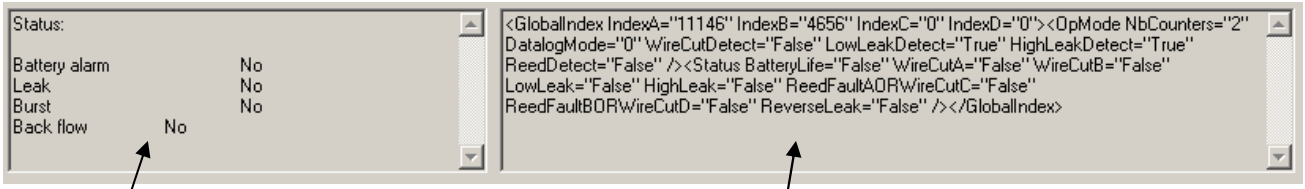
The threshold (in pulses) shows what amount of flow, in the set duration time, causes an alarm


Burst alarm
Measurement duration in minutes:
255
The measurement duration is the periode of time for counting the meter pulses for the calculation of flow rate or energy consumption. Warning: This value is used for burst and leak analysation.
Channel 1:
Flow rate or energy consumption in pulses per measurement duration:
1000
235294,12 l/h ; W = 235,3 m3/h ; kW
Measurement duration multiplicator:
3
Time period for alarm activation: 765 min
If the flow rate or energy consumption is for the whole time period above the alarm level the burst alarm will be activated.

Parameterisation of channel 1. If more channels are activated they can be parameterised, too.

Increase the measurement duration via the multiplicator. If you don't want to change the duration set the multiplicator on "1"

4.1.8 Status



Shows the alarm status

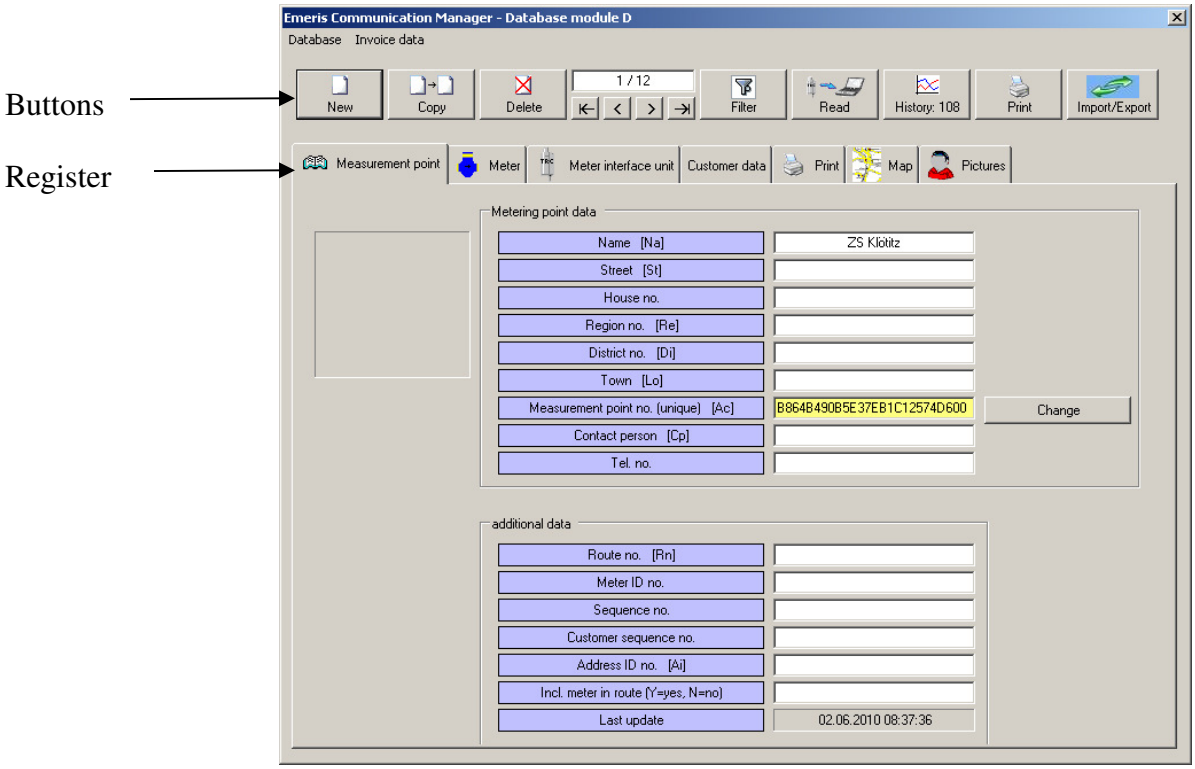
No relevance for users

4.2 Module D

In the database module D all information about the individual measuring points and the inserted radio modules is shown. Here the operator can store information over the measuring point, the meter, the radio module and the customers.
Apart from this fundamental information there is the possibility to represent the meter progress also graphically and alphanumerically and to export the data base to Excel.

4.2.1 Operation

After starting module D the following window appears:



With the “Buttons“ new data records can be put on, copies by existing records can be created and individual entries can be deleted.
Over the arrow keys you can switch between the individual data base entries. By the Button „filters “and special keywords can the number of indicated data records can be limited.
„History“ forms a graphic diagram by the stored meter readings of the measuring point. The indicated period and the representational form can be selected freely.

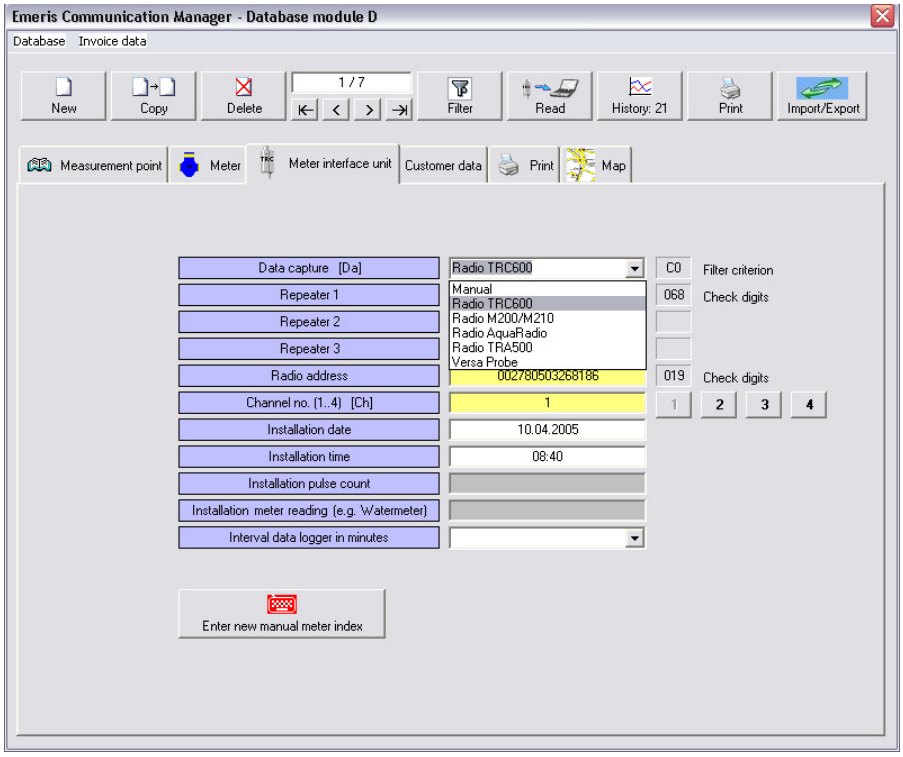
If a measuring point is to be read out directly, Module C can be opened directly for over the Button “Read” and the indicated radio module address is inserted automatically.

Data base contents can be transferred also to Excel or to the EMERIS route manager. For this the Button „Import/Export“is used.

4.2.2 Database input fields

To use and import/export the data records, it is important that the yellow deposited fields, in every register, are filled out and that the “measurement point no.” (in register “Measurement point”) is entered unique in every data base entry.
The entry “pulse rate per unit” (in register meter) must be correctly entered, in order to guarantee the correct processing of the selected values.

In order to activate the data acquisition over a radio module it is important that in the register „Meter interface unit“ the data acquisition is set on „Radio TRC600“. The „Radio TRA500“ is the older radio system of ELSTER. Since 2005, all sold radio components are of the type TRC600. The system „Versa probe“ is an Encoder similar logging system, which picks up the data by a Handheld. The meter interface module is powered inductively by the Handheld.

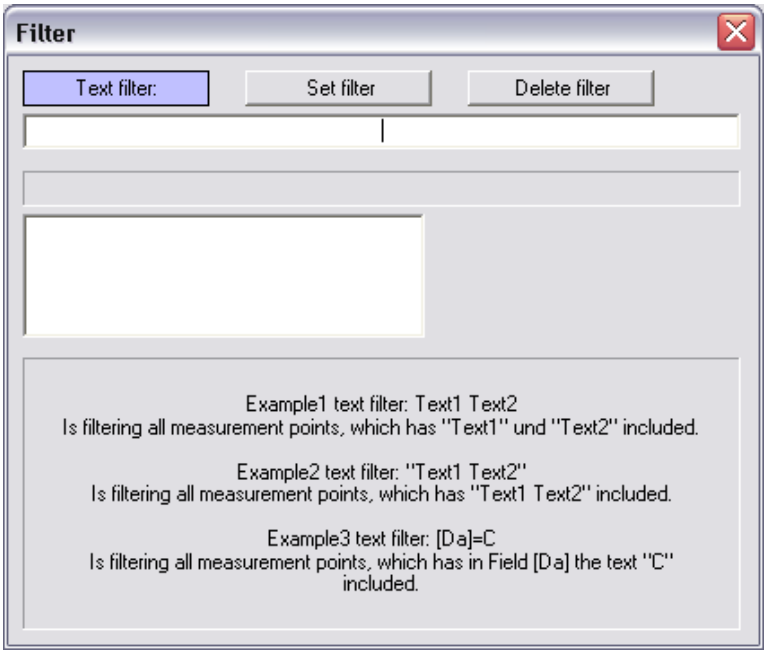


In addition to this it is necessary to enter the correct 15-digits long radio address and the associated channel („Channel no.“). When Repeaters are used, the radio address must be entered, too.
Note: If several Repeater are used, consider that „Repeater 1“ is the nearest to the person who reads out the data!

All further „white coloured fields“ did not contain necessary information for a successful radio transmission or an evaluation of the data. They only serve the clarity for the user.

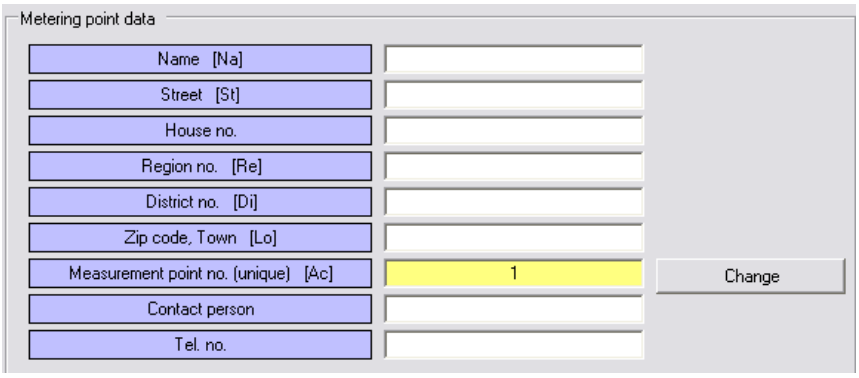
4.2.3 Filter function

With the filter function the number of indicated measuring points can be limited.
If lot data base entries are deposited, it is difficult to reach a measuring point entry over the arrow keys. The direct selection of a measuring point is possible with the filter function. As many as necessary references can be used, to minimize the number of indicated measuring points.
In general, this function works as a „and“ filter. Thus, only these measuring points are indicated, which somewhere contain the entered word or the entered words in the measuring point description. It doesn't matter in which field the appropriate words are deposited. During the input of several search words, these must not be deposited in the same description field.
In the following example the words “ELSTER“ and „Otto-Hahn-Straße“ must be in the measuring point entry. (ELSTER in the field „Name“ and “Otto-Hahn-Straße” in the field “Street “)
Note: Upper and lower case are to be considered in the filter function absolutely!


Filter
Text filter:
Set filter
Delete filter
Example1 text filter: Text1 Text2
Is filtering all measurement points, which has "Text1" und "Text2" included.
Example2 text filter: "Text1 Text2"
Is filtering all measurement points, which has "Text1 Text2" included.
Example3 text filter: [Da]=C
Is filtering all measurement points, which has in Field [Da] the text "C" included.

When you, for example, search for all entries of a certain road, it is possible that the street name exists out of several words, like e.g. Lorscher Weg.
In order to look for exactly these entries, “Lorscher Weg” must be entered into the filter text (with quotation marks!). Then only the measuring points appear in those „Lorscher Weg “ is entered in one measuring point field (here „Street“).
It is also possible to enter just a part of the searched term. When you search for entries similar to „Otto-Hahn-Straße“, it is enough to enter “Otto-Hahn” (with or without quotation marks) or „Otto Hahn“ (without quotation marks) into the filter.

A further helpful filter function can be used over the abbreviations of the measuring point entries.



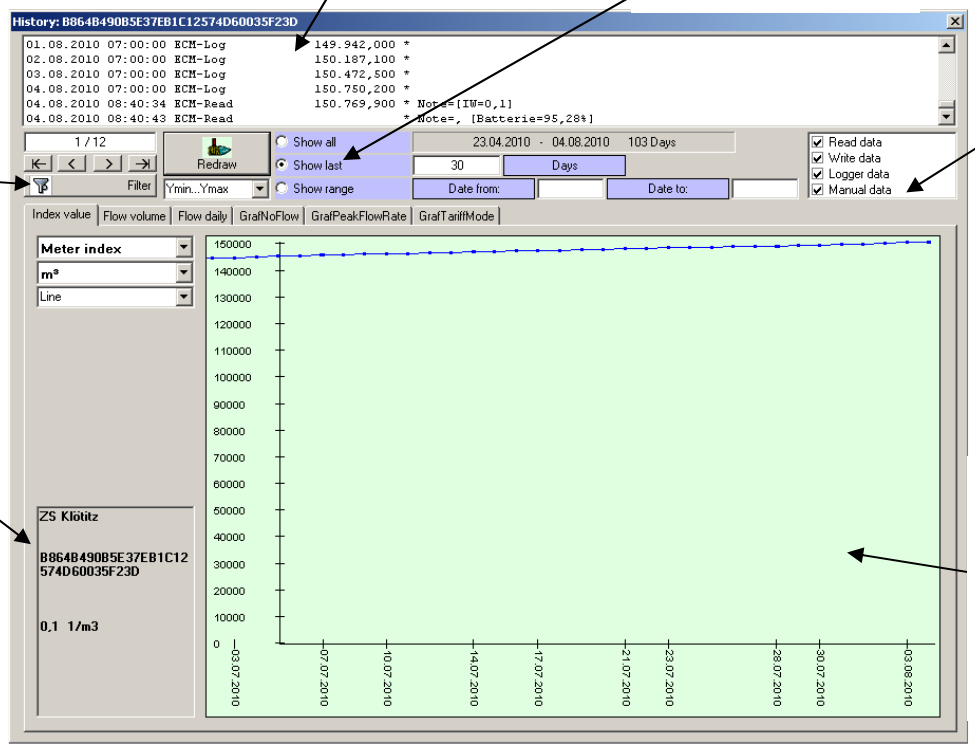
You can see in the illustration that there are some abbreviations in the register „Metering point data“. [Na] symbolises the Name, [St] is the Street, etc.
Note: The accurate abbreviation must be entered into the filter.
e.g.: [Na]=ELSTER

The upper and lower case are also of crucial importance.
A search like the following would lead to no result:
e.g.: [**n**a]=ELSTER or [N**A**]=ELSTER

With this filter variant no blank may follow after the angular clammy and after the equal character.
As criteria also several abbreviations can be used. These are separated by a blank.
e.g.: [Na]=ELSTER [St]=Otto

4.2.4 History

By the history the meter progress can be plotted during the entire time or a certain period. The history uses the actual read out data from the radio module and the saved data logger values, if available.



In the history view any measuring point can be indicated over the metering point selection field. The filter function works exactly the same as descript in chapter 4.2.3.
In order to be able to limit the indicated range individually, an initial date and a final date can be entered. As soon as at one of the two entries a change is made here, the marking changes on the point „Show Range" automatically. It is Important to enter a correct date in the format „DD.MM.YYYY ". Otherwise the appropriate date field is deposited red and an evaluation is not possible.

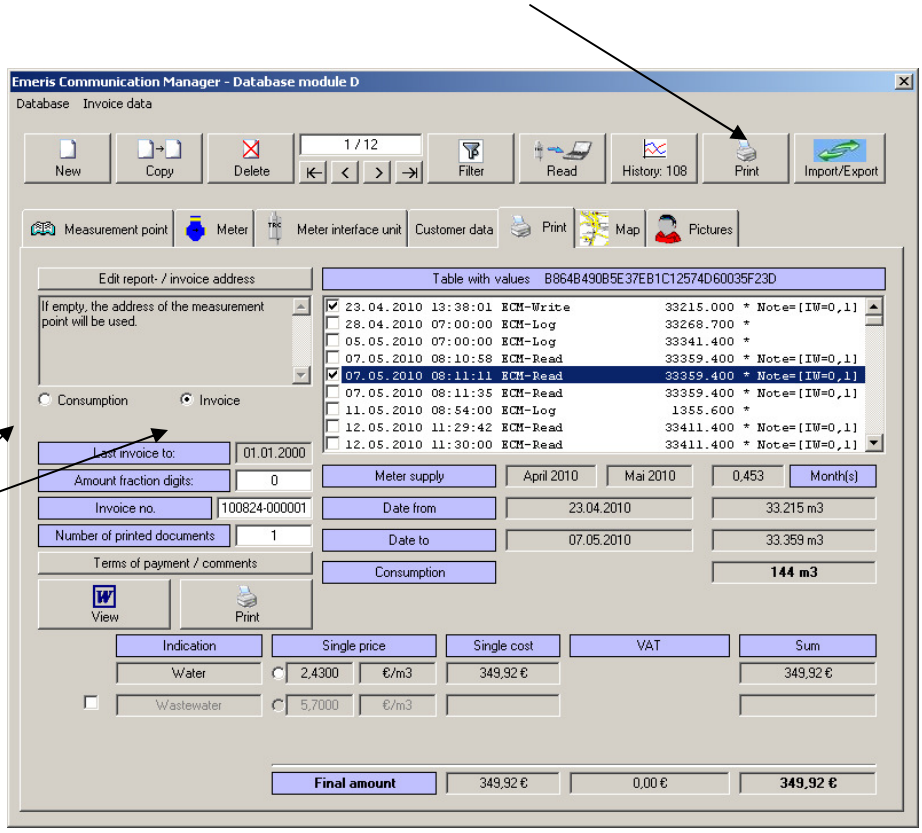
The information about the measuring point on the left display screen page, contains the following entries:
- Measuring point name
- Street
- Zip code, Town
- Measurement Point No.
- Meter Type
- Meter size
- Meter number
- Pulse rate per unit
- Reading cycle
- Minimum consumption
- Maximum consumption

If nothing is deposited in one of these input fields, the appropriate line remains empty.

4.2.5 Print

Starting from the ECM version 3.01b there is the possibility to print the consumption data and invoices in Module D. For this reason the register “Print” was added.

Additionally to the new register there is another “Print”-button in the upper list.



You can select whether the consumption data or the invoice is printed.

If the Button “Print” from the upper list is pressed, you can select between the consumption data or the invoice that is printed. Subsequently, all filtered metering points are printed. If no metering points are filtered, all existing metering points are printed!

In order to print a single metering point, first the metering point must be selected.
Afterwards, one period must be selected in the consumption table. This period may consist only of a starting date and a final date!
If you don’t add a „report-/invoice address “, the address from the register „Measurement point“ is used.
Apart from individual terms of payment or comments also the individual prices and tax rates for water, waste water and meter deployment can be set.

If all necessary inputs are made, start the print via the „Print” Button under „Terms of payment/comments“.

Now a Word-document opens, in which you click on “activate macros“. Afterwards the print is started.

The basic layout of the consumption data/invoice can be individually adapted.

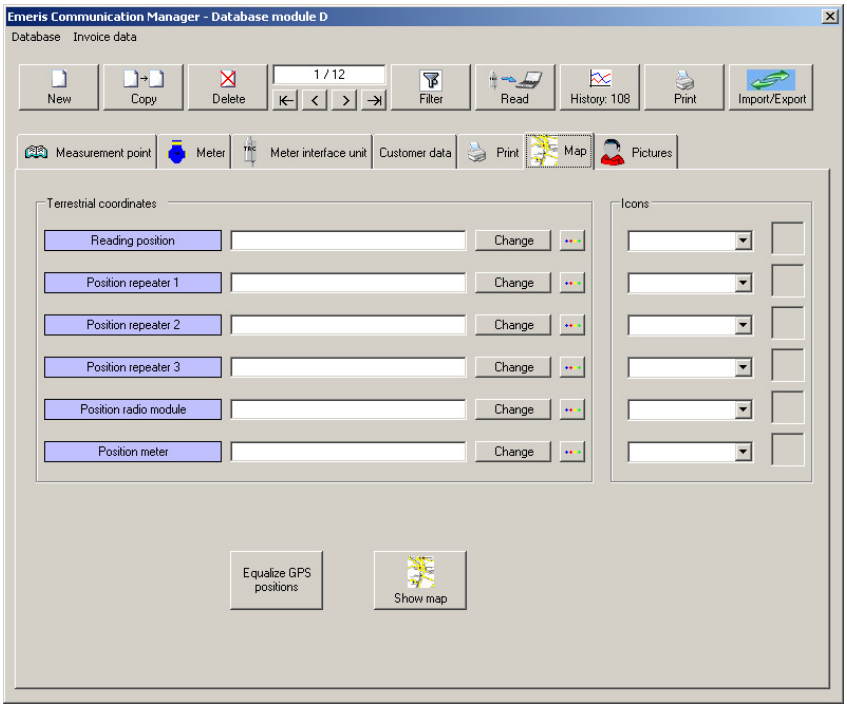
For this, open the Word file „PrintMacroVorlage.dot“ in the installation listing. Normally the path is: C:\Programme\EMERIS Communication Manager\ ECM \ Custom DATA

When you changed the Word file after your needs, you must store it again under the same file name.

Note: Here it is particularly necessary to save the data in the file format .dot

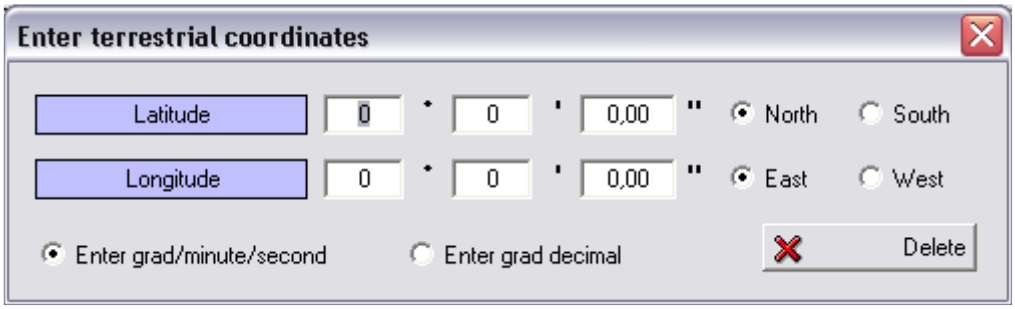
4.2.6 Map

The Map function allows you to insert different maps of the meter locations. You can use every JPG or BMP files.



To use the GPS based sequence reading you need to fill in the coordinates of the „Reading position“ for your measurement points!

Therefore click the “change” button behind the text field READING POSITION and enter the coordinates in the format of your choice..



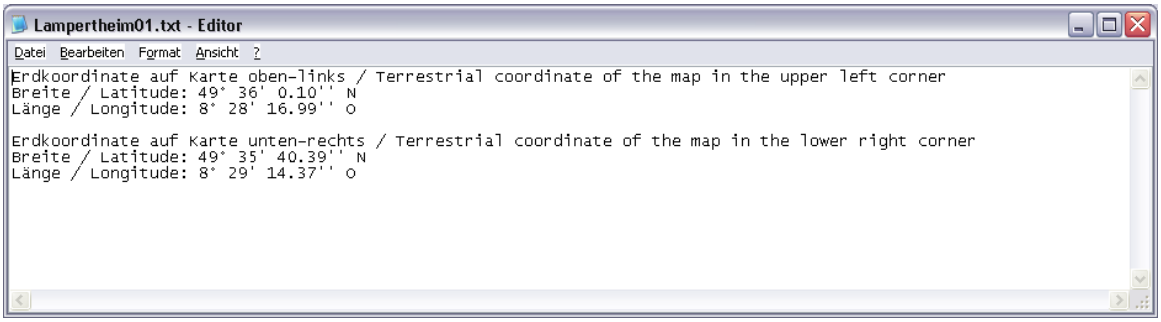
To insert a new map follow these steps:

- Make a map screenshot out of e.g. Google Maps or Microsoft Virtual Earth. Remember the terrestrial coordinate of the map in the upper left and in the lower right corner.
- Save the map as JPG or BMP file. The file name is individual (e.g. Lampertheim01.jpg)
- Copy the file to the folder:
  C:\Programme\Emeris Communication Manager\ECM\Custom data\Map
- Create a .txt file with the name of the JPG or BMP file (in our case Lampertheim01.txt) and insert the text:

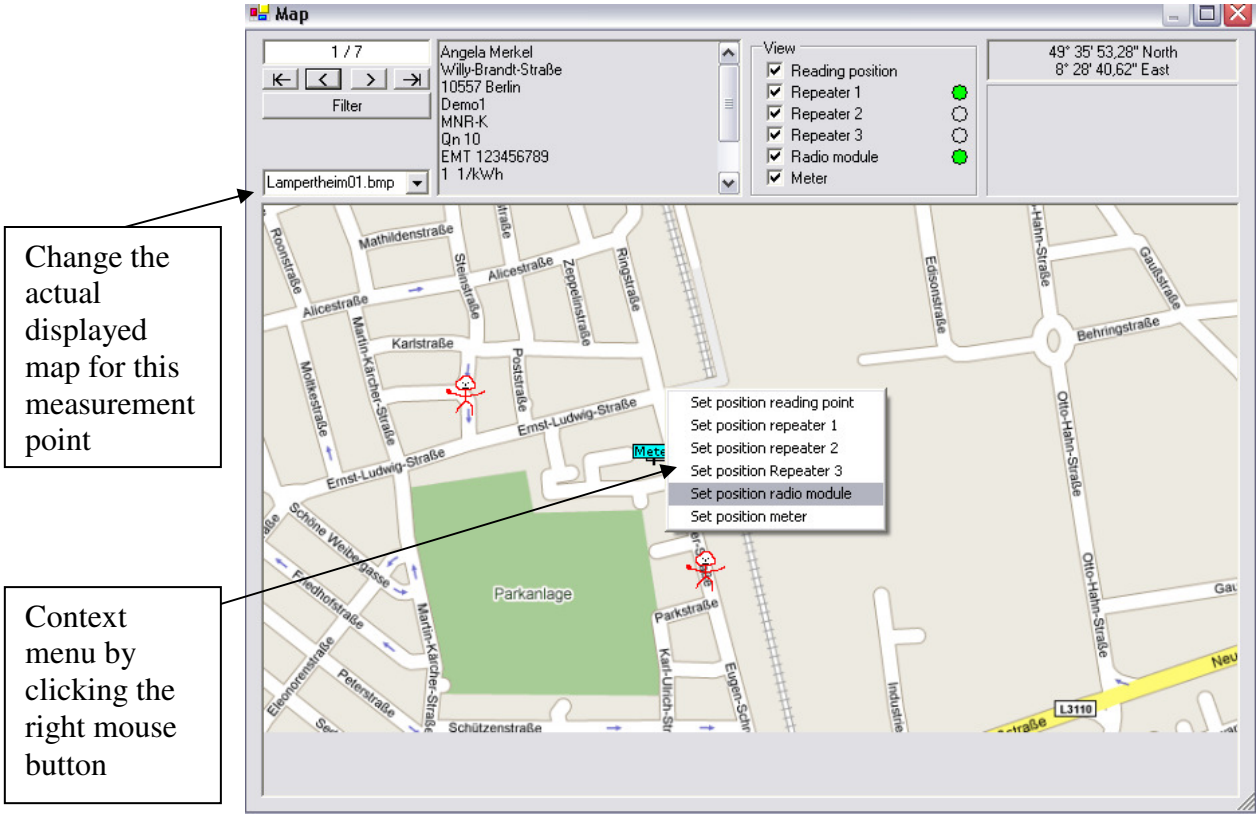
Erdkoordinate auf Karte oben-links / Terrestrial coordinate of the map in the upper left corner
Breite / Latitude: 0° 0' 0'' N
Länge / Longitude: 0° 0' 0'' O

Erdkoordinate auf Karte unten-rechts / Terrestrial coordinate of the map in the lower right corner
Breite / Latitude: 0° 0' 0'' N
Länge / Longitude: 0° 0' 0'' O

- Replace the “0” with the coordinates of your map.
- You can also use a demo “txt” file and save it with a new name.
-


Lampertheim01.txt - Editor
Datei Bearbeiten Format Ansicht ?
Erdkoordinate auf Karte oben-links / Terrestrial coordinate of the map in the upper left corner
Breite / Latitude: 49° 36' 0.10'' N
Länge / Longitude: 8° 28' 16.99'' O
Erdkoordinate auf Karte unten-rechts / Terrestrial coordinate of the map in the lower right corner
Breite / Latitude: 49° 35' 40.39'' N
Länge / Longitude: 8° 29' 14.37'' O

After you saved the “txt” and the graphic file, you can open ECM go to Module D in the register “Map” and click on “Show map”. Now you can define a map to every Measurement point in your database.



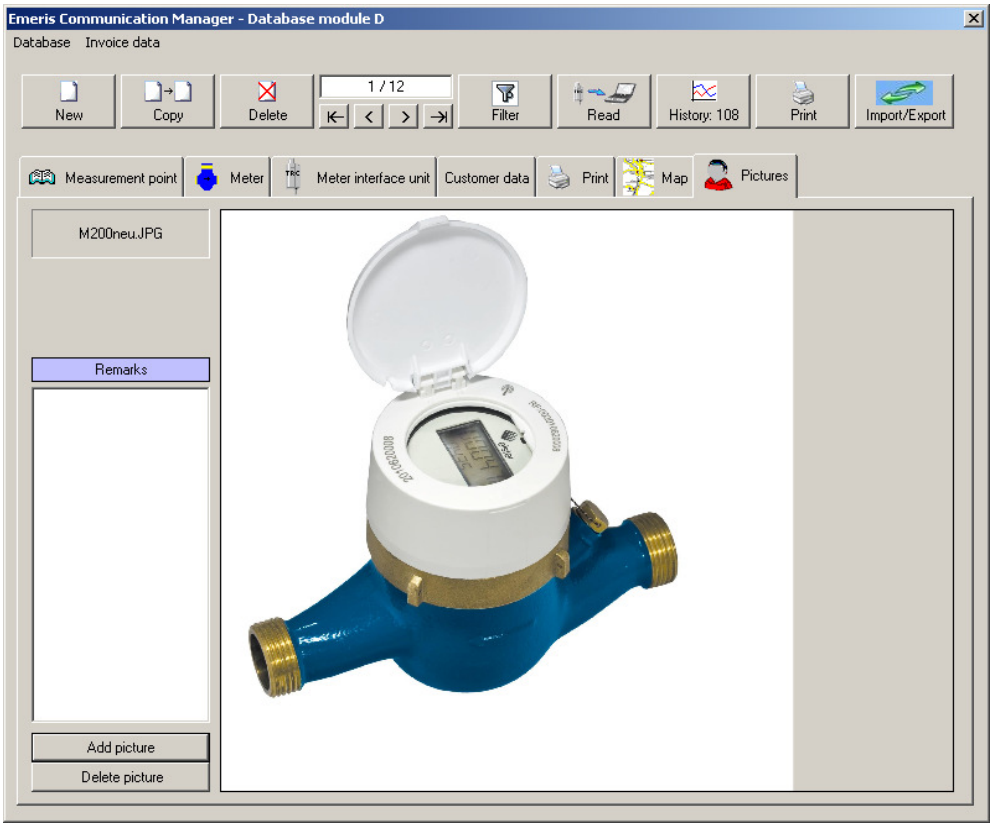
You can set the different radio modules on the map by clicking the right mouse button somewhere in the map view.

The icons used can be designed individually. Save your own ".ico" graphic (**ONLY** a resolution of 32x32 **WORKS**) in the folder:
C:\Programme\Emeris Communication Manager\ECM\Custom data
and be sure your file name starts with "map" (e.g. "mapCustom Flag.ico")

4.2.7 Pictures

In the pictures menu you can add pictures of the meter location to make it easier to find or identify the meter.

You can add pictures in the format *.jpg;*.bmp;*.png;*.gif;*.tif



4.2.8 Read out via Module D

By pressing the button “Read” in Module D you can read out a single module.
You have to choose what kind of values you want to read out.

Index value, alarm flags: The current meter reading and alarms, if occurred, are read out and stored

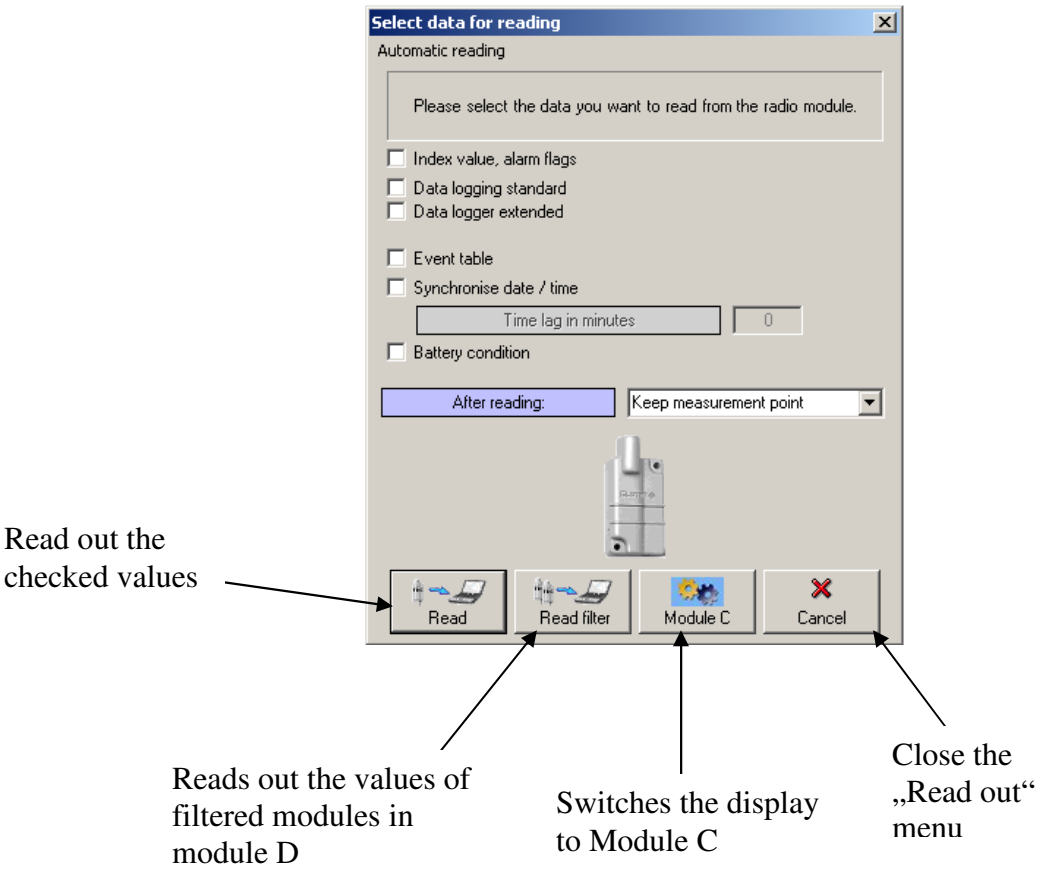
Data logging standard: The modules data logger with up to 24 values are read out

Data logger extended: The data logger of the special TRC600DL modules is read out
Attention: Just click the data logger type of your TRC module. The regular TRC600 modules have only the standard data logger.

Event table: Gives out advanced information of alarms (e.g. date, time)

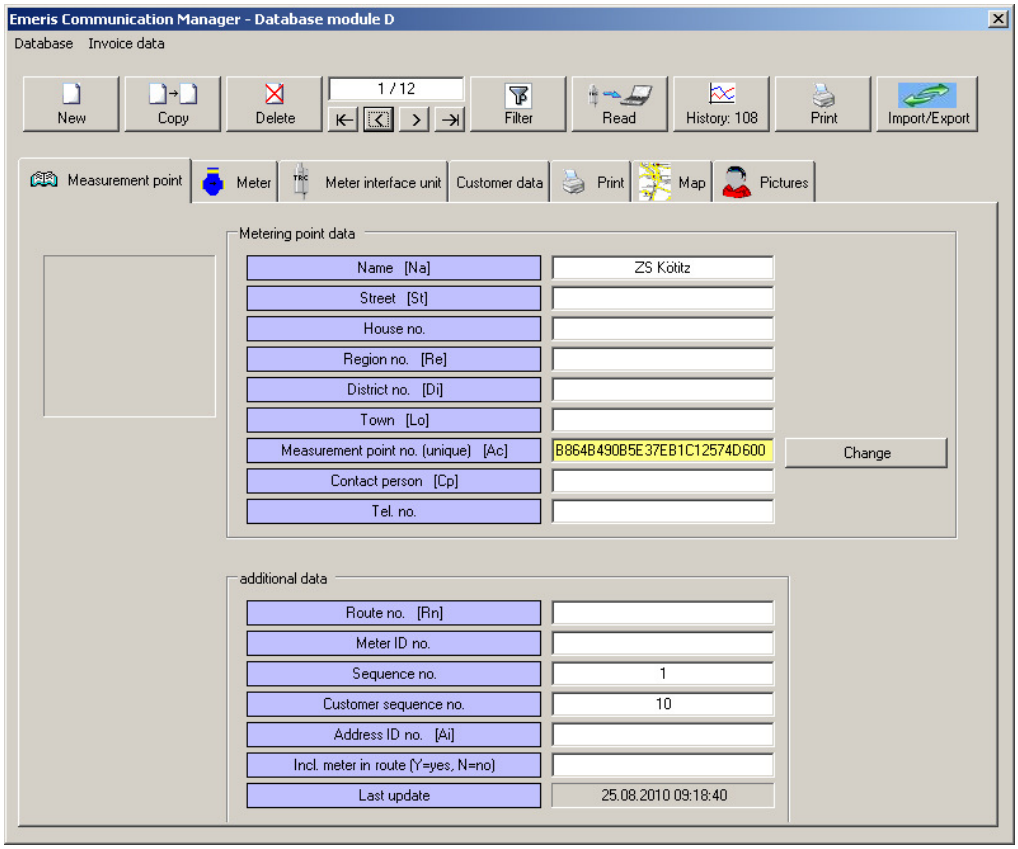
Synchronise date / time: The internal radio module clock is synchronized with the PC clock.
Attention: By activating this function the data logger gets deactivated!

Battery condition: The battery level is displayed in “%”

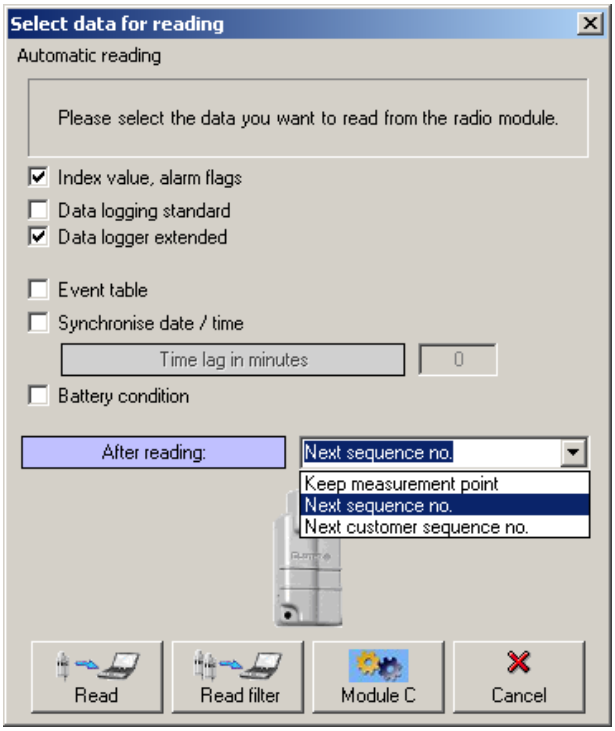


4.2.9 Sequence read out via Module D

You can use the text fields “Sequence no.” and Customer sequence no.” to build up a read out route in Module D.
You can use different formats to build up a route.
E.g.:
- 1,2,3,4,…
- 10,20,21,22,30,35,…
- 0010, 0020, 0021, 0028,…

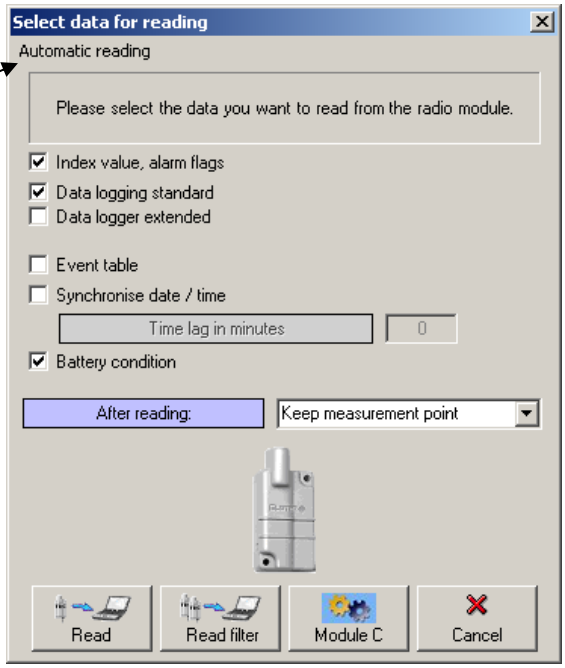


When you now choose “Read” you can select one of the two fields that shall be used.
After the successful read out of the measurement point, Module D switches automatically to the next higher number of the “Sequence no.” or the “Customer sequence no.” entry.



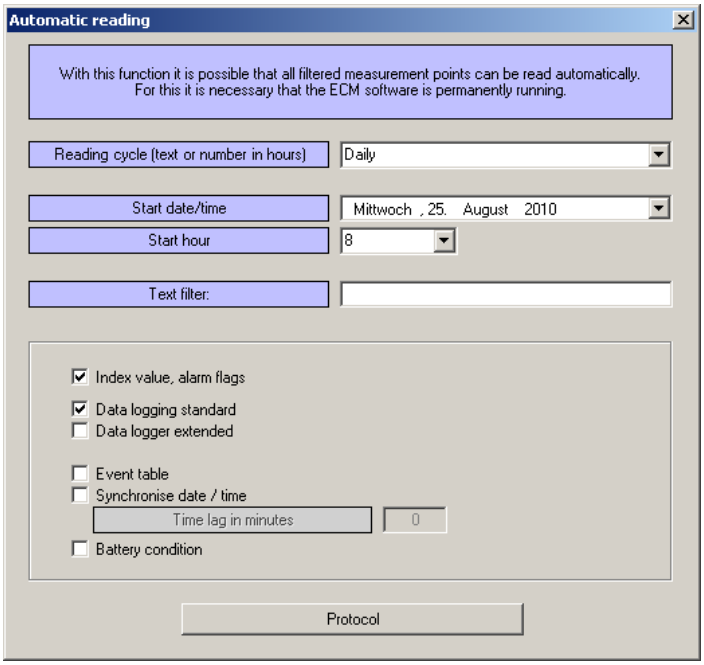
4.2.10 Automatic read out via Module D

Set automatic reading interval



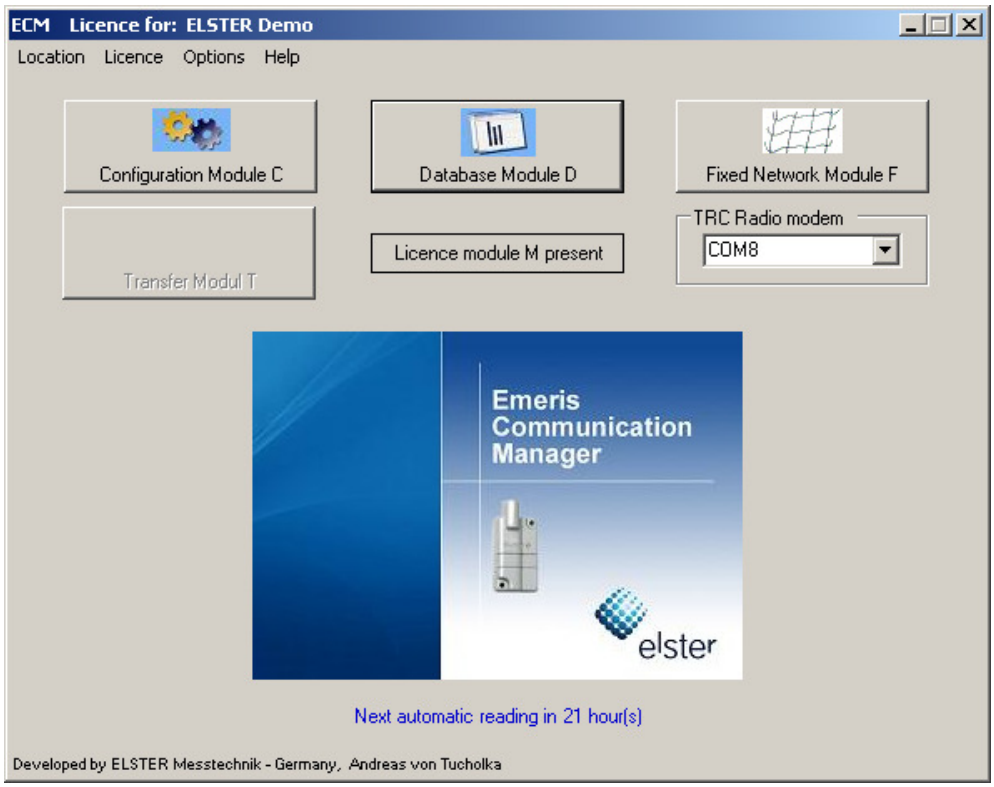
In the “Read” menu you can choose the option “Automatic reading”.

Now you can select the read out interval in the following screen.



After entering the criteria for the read out just close the window via “X”
If you close Module D you can see in the home screen when the next automatic read out starts.

Attention: The ECM software must be running in the background that the automatic read out starts!



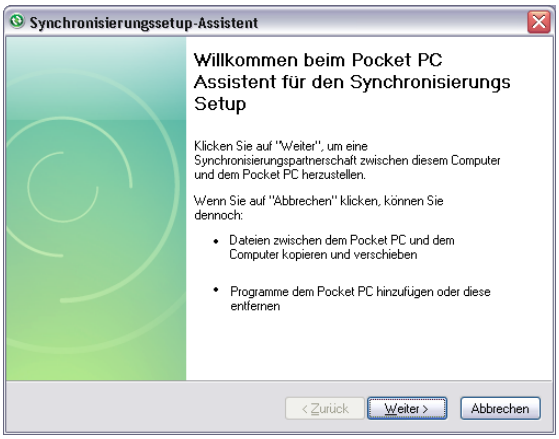
5 ECM-PDA software user manual

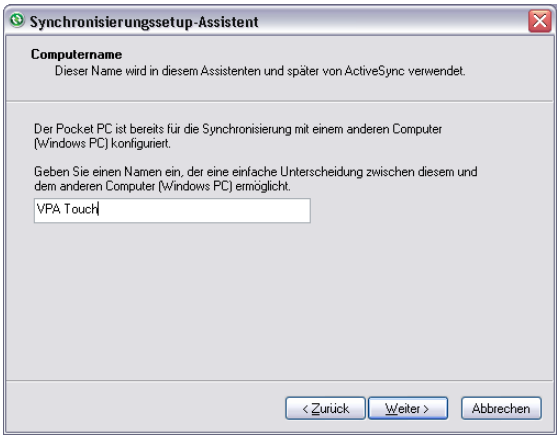
The ECM-PDA Module is used on Windows Mobile 5 or 6 based handheld / PDA / Smartphone devices. In connection with the TRC604 B Bluetooth antenna you can start a radio based read-out.

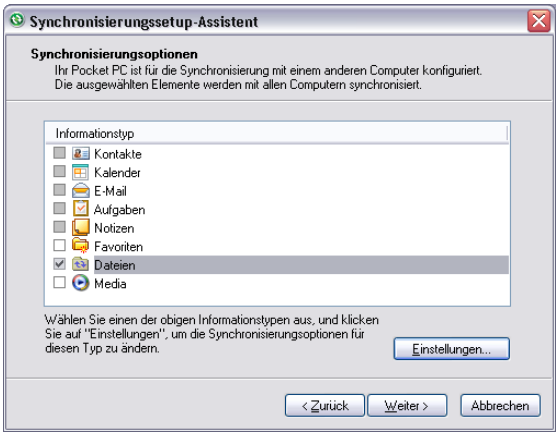
5.1 Handheld installation for Windows XP with Microsoft Active Sync

You need to check if the program „Active Sync “from Microsoft or Windows is installed on your computer. If this is not the case, you can download „Active Sync “free of charge in the world wide web.

After successful installation you must synchronise the PDA with your computer. The synchronisation assistant should start immediately.


Synchronisierungssetup-Assistent
Willkommen beim Pocket PC Assistent für den Synchronisierungs Setup
Klicken Sie auf "Weiter", um eine Synchronisierungspartnerschaft zwischen diesem Computer und dem Pocket PC herzustellen.
Wenn Sie auf "Abbrechen" klicken, können Sie dennoch:
Dateien zwischen dem Pocket PC und dem Computer kopieren und verschieben
Programme dem Pocket PC hinzufügen oder diese entfernen
< Zurück
Weiter >
Abbrechen

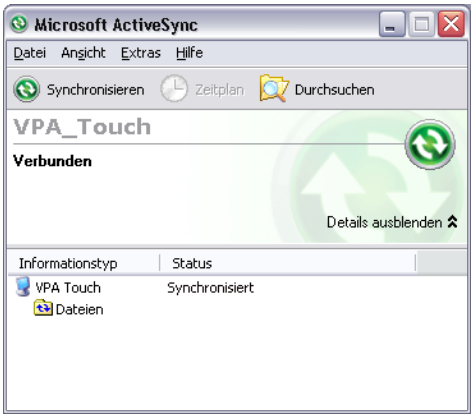

Synchronisierungssetup-Assistent
Computername
Dieser Name wird in diesem Assistenten und später von ActiveSync verwendet.
Der Pocket PC ist bereits für die Synchronisierung mit einem anderen Computer (Windows PC) konfiguriert.
Geben Sie einen Namen ein, der eine einfache Unterscheidung zwischen diesem und dem anderen Computer (Windows PC) ermöglicht.
VPA Touch
< Zurück
Weiter >
Abbrechen



Select a computer name for the PDA and select afterwards the type “Files” which need to be synchronised. In any case the type „FILES“ must be selected. The program now stores, according to the standard installation path, a file in the folder „My documents “on your computer.

This usually is:
„PDA description“ **My documents**

The path is like:
My documents\ VPA_Touch My documents

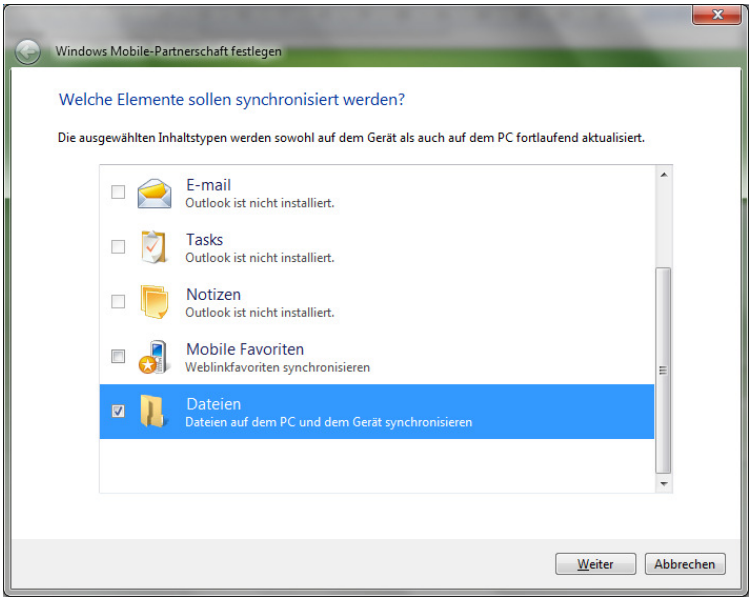


5.2 Handheld installation for Windows 7 with Microsoft Mobile device center

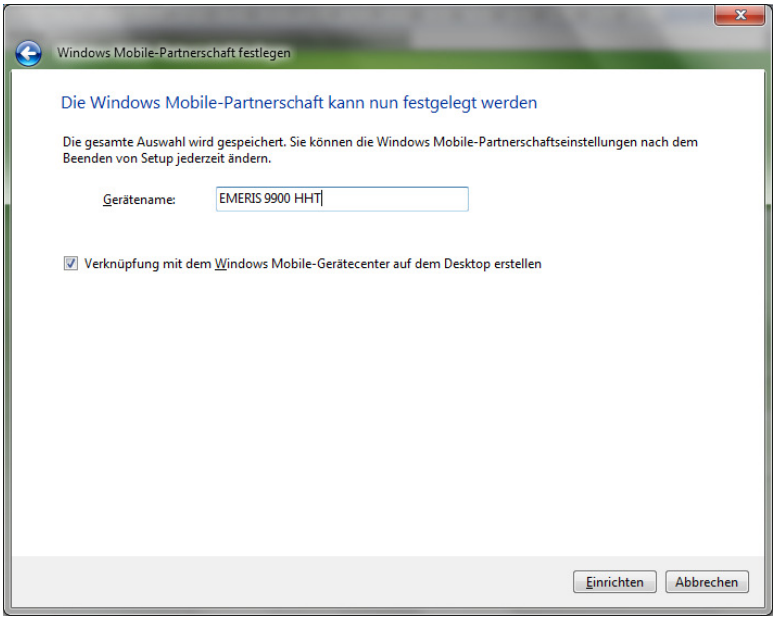
Connect the USB connector of the Handheld to your PC.

To configure the Mobile Device choose „Set up“ the device.

Afterwards it is important to synchronise the „Files“.



Press next and set a name for your mobile device.

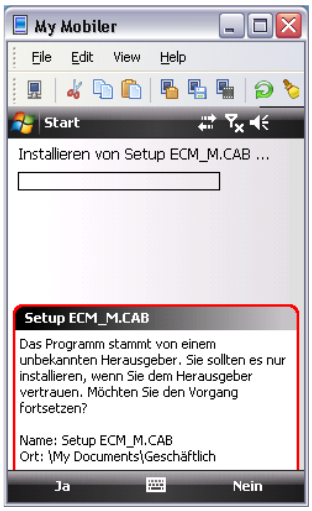

Windows Mobile-Partnerschaft festlegen
Die Windows Mobile-Partnerschaft kann nun festgelegt werden
Die gesamte Auswahl wird gespeichert. Sie können die Windows Mobile-Partnerschaftseinstellungen nach dem Beenden von Setup jederzeit ändern.
Gerätename:
EMERIS 9900 HHT
Verknüpfung mit dem Windows Mobile-Gerätecenter auf dem Desktop erstellen
Einrichten
Abbrechen

Your handheld device is now configured with your PC.

5.3 Installation of the ECM-PDA software

Copy the file „Setup_ECM_PDA.cab" to your handheld.

Open the file explorer and click on the ECM-PDA file.,


My Mobiler
File Edit View Help
Start
Installieren von Setup ECM_M.CAB ...
Setup ECM_M.CAB
Das Programm stammt von einem unbekannten Herausgeber. Sie sollten es nur installieren, wenn Sie dem Herausgeber vertrauen. Möchten Sie den Vorgang fortsetzen?
Name: Setup ECM_M.CAB
Ort: \My Documents\Geschäftlich
Ja
Nein

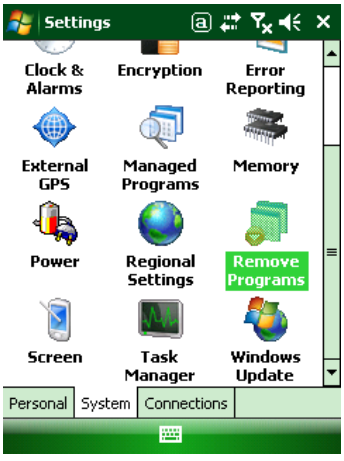
My Mobiler
File Edit View Help
Start
ok
Setup ECM_M.CAB wurde erfolgreich auf dem Gerät installiert.
Falls Sie mehr Speicherplatz benötigen, können Sie installierte Programme entfernen.

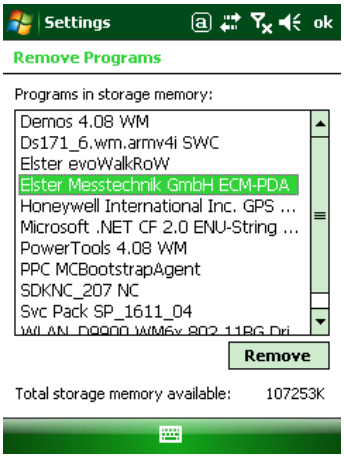
Start the installation file on your handheld. Answer the safety reference with „Yes". Then select a storage location (e.g. PDA or memory card) and wait until the program is installed. Afterwards you receive the message, that the program „Setup_ECM_PDA.CAB" was successfully installed.

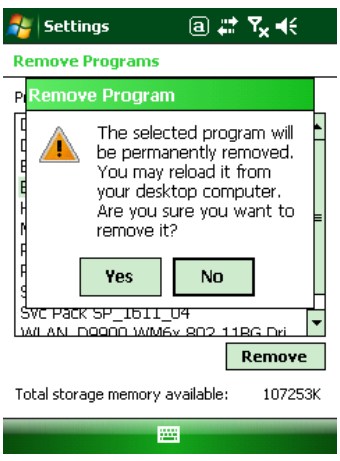
5.3.1 Installation from an update for the ECM-PDA version

Before you update your software version of ECM-PDA, you need to uninstall ECM-PDA from your PDA. To uninstall ECM-PDA follow these steps:

Click the „Start" menu button on your handheld. Choose "Settings" → "Remove programs"
Now mark "Elster Messtechnik GmbH ECM-PDA" and press the "Remove" button.






Settings
Remove Programs
Remove Program
The selected program will be permanently removed. You may reload it from your desktop computer. Are you sure you want to remove it?
Yes
No
Svc Pack SP_1611_04
Remove
Total storage memory available: 107253K

Confirm the appearing window with „Yes“ and the uninstall process of the old version is completed.

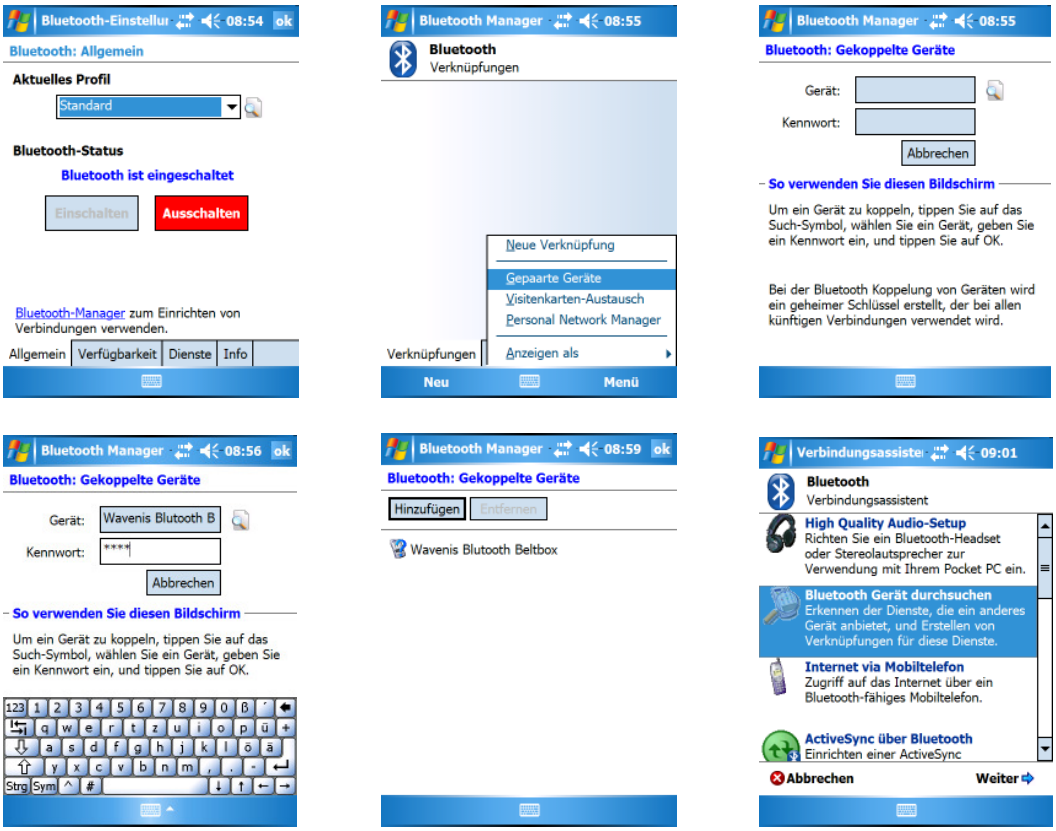
To install the newer version refer to point 1.3 “Installation of the ECM-PDA software” in this manual.

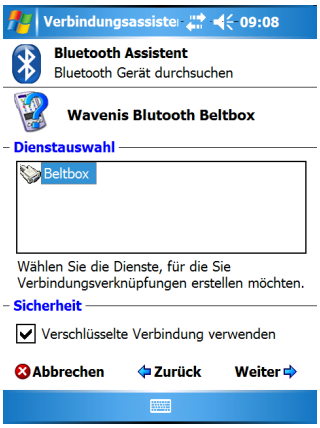
5.4 Installation of the Bluetooth beltbox for the radio communication

5.4.1 Installation of the Bluetooth antenna in Windows Mobile 5

The next step is to install the Bluetooth connection between the PDA and the Bluetooth antenna. For this you go on the PDA into the menu „Connections“ and select Bluetooth. Make sure that the Bluetooth interface is switched on. Then change into the „Bluetooth Manager“. Select „Paired devices“ and click on the search symbol on the right bottom. If the Bluetooth antenna is switched on, you find the equipment „Wavenis Bluetooth Belt“. Select this and enter the password “0000”. Subsequently, you leave the menu with „ok “. Now you are again in the Bluetooth Manager under the register „Links“. Select „New“. In the Bluetooth connection assistant choose the point “Scan Bluetooth device“.
As soon as the Wavenis antenna appears, select it. Within the service selection you mark the function „Beltbox “and set under „security“ the checkbox with „secure connection“. Subsequently, you click „Next“.
The initialisation of the Bluetooth antenna is now finished.

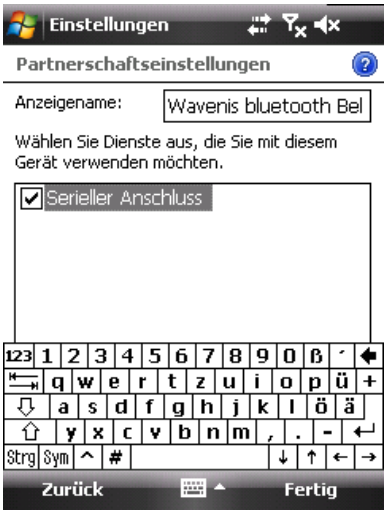
The down following illustrations show the steps just described as screen sequence on the PDA.



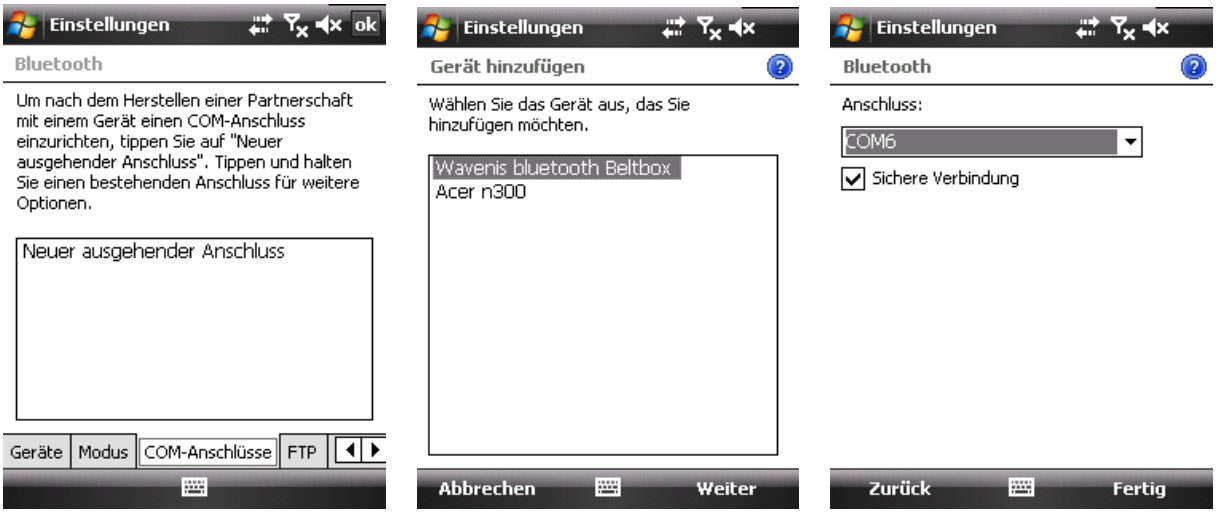


5.4.2 Installation of the Bluetooth antenna in Windows Mobile 6

As next step you parameterise the Bluetooth connection between the PDA and the Bluetooth antenna. Start the menu „Connections“ on the PDA and select Bluetooth. Look afterwards for all available Bluetooth devices. If the TRC604 B antenna is switched on, the device „Wavenis Bluetooth Beltbox“ is found. Select this and add it as a serial connection.



As next you select the button „COM-connections” in the Bluetooth menu.
Input a new outgoing connection with „the Wavenis Bluetooth Beltbox “.
The selected connection should be COM 6. If this connection is not available or cannot be selected (ex.s: HP IPaq), you can choose any existing COM-Port between COM 1 and COM 9.



If you need a key or a password during the installation, use „0000“.

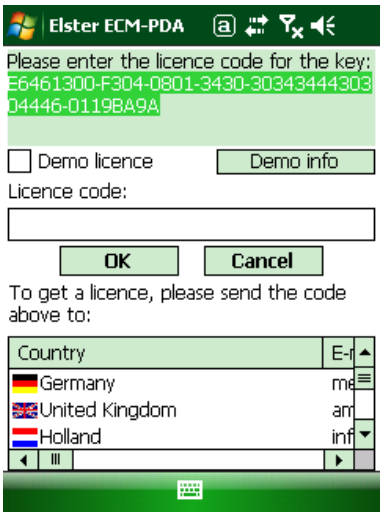
5.4.3 Installation of the Bluetooth antenna on the EMERIS 9900 handheld device

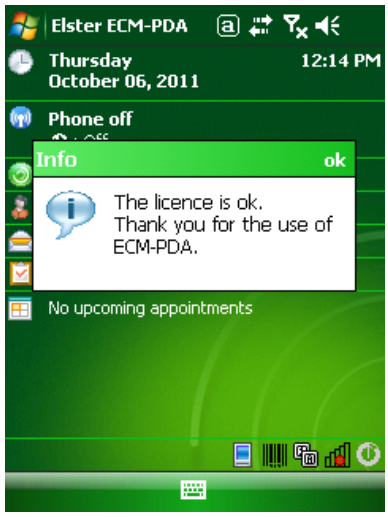
In the EMERIS 9900 Handheld device the radio card is already integrated. There is no need to set up a Bluetooth connection.

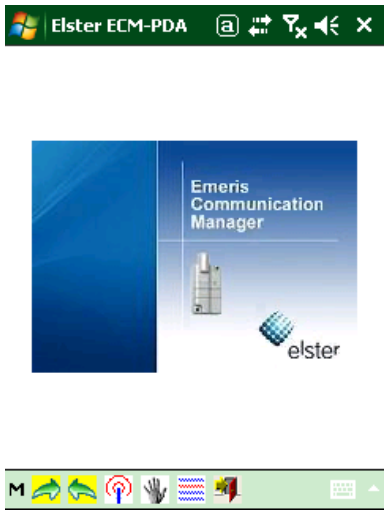
The Radio card is connected to COM 1.

5.5 Starting the ECM-PDA software on your handheld

After the first start of the software you have to activate your ECM-PDA software with a licence key. You receive the licence key directly from ELSTER Messtechnik after you send us the individual Handheld key:





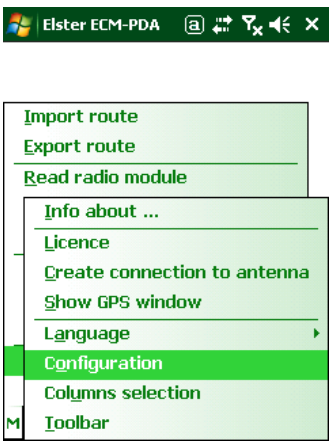


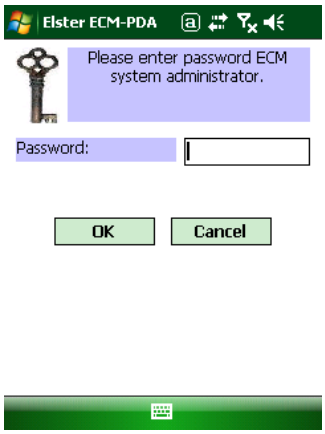
If you want to choose another language for the ECM-PDA software on your handheld start the program and choose via the Menu on the left bottom ("M") → "Options" → "Language". After that you can choose your Language.

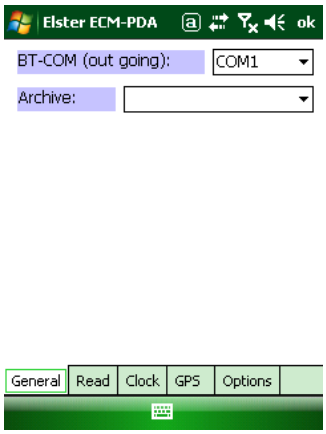
5.5.1 Configuration of the radio antenna, GPS and standard features

To select the COM-Port for your Bluetooth beltbox and for any other important settings you need to enter the configuration menu

Access the main menu via the "M" on the left bottom and choose "Options" and "Configuration"







To change the configuration you need to enter a password.

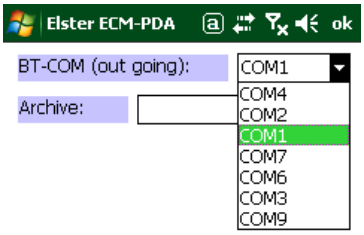
The password is: **admin001**

It is not possible to change this password.

Afterwards you enter the configuration menu.

5.5.2 General settings

To read out meters via radio you have to set the COM Port of the Bluetooth beltbox.



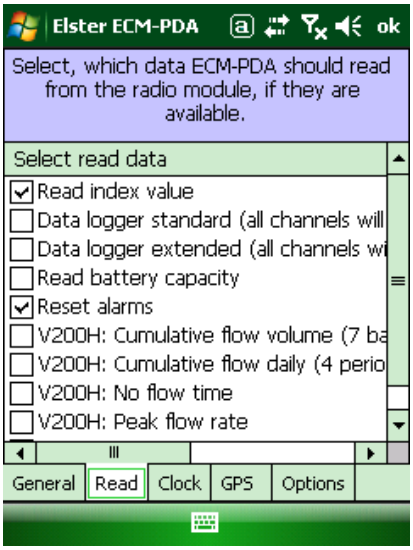
Select the serial COM port of your Bluetooth Beltbox out of the drop down list.

EMERIS 9900 Handheld: The radio card is installed in COM 1

You can also select a second Memory spot for the Meter reading data in the “Archive” drop down list.
It makes sense to select the Memory Card out of the list to safe the data on the handheld itself and on the memory card as well.

5.5.3 Read

The next register contains the read options for the radio communication.



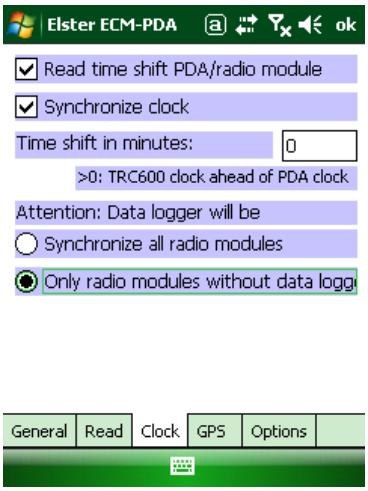
The V200H options are for special applications and will not be explained in this point.

Read index value:	The current meter reading is read
Data logger standard:	The 24 historical values of the data logger are read
Data logger extended:	The up to 2.500 historical values are read

Attention: The extended data logger is only available for some TPR (Falcon radio modules) and some TRC600 modules (2-channel or 4-channel radio module). Please ask if you´re modules support the extended data logger

Read battery capacity:	The battery capacity (in %) is read. NOT supported for M200 / M210 meter
Reset alarms:	Resets the alarm status. If an alarm occurs, it will be displayed and stored after the read out. If checked the alarm is resetted inside the radio module / meter

5.5.4 Clock



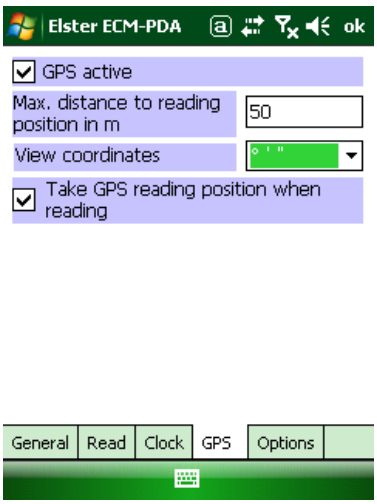
You can select if the time difference between the Handheld and the radio module / meter shall be noticed during the read out.
Check the first box if the time difference for each measurement point shall be saved.

You can check the box “Synchronize clock” to set the Handheld time into the radio module / meter after each read out.
The time shift should be set to “0”, so no difference is set between the handheld time and the radio module / meter time.
Attention: If you have radio modules or / meters with an activated data logger you should NOT synchronise the time of those modules / meters.

If you select “Synchronise all radio modules” the data logger feature will be deactivated!

It is recommended to synchronise “Only radio modules without data logger”

5.5.5 GPS



If you're handheld has an integrated GPS sensor you can use the sensor by setting "GPS active".

Set the check box "Take GPS reading position when reading" to save your current GPS position for the successful read out radio module / meter.

When the GPS coordinates for each measurement point are stored you can start a sequence GPS based reading the next time.

Set the "max. distance to reading position in m" according to the local installation conditions between app. 20 and app. 70 meters.

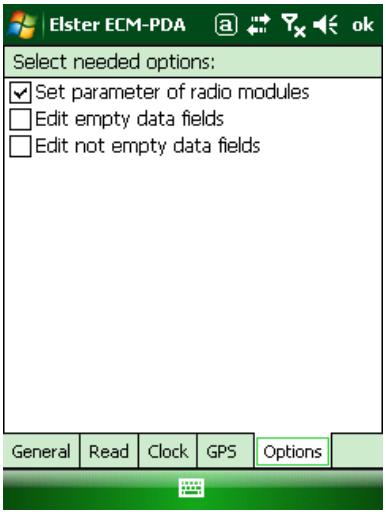
5.5.6 Options

You can select different user rights for the handheld user.

"Set parameter of radio modules":	Allows changing values like alarms, data logger settings, pulse values
"Edit empty data fields":	You can change empty information fields from Database module D via the handheld device. The changes will be synchronised when the route is imported to the ECM software on the PC.
"Edit not empty data fields":	You can change filled out information fields from Database module D via the handheld device. The changes will be synchronised when the route is imported to the ECM software on the PC.

Attention: The changes might influence exports to other systems!

It is not recommended to activate "Edit not empty data fields" for every user of the handheld!

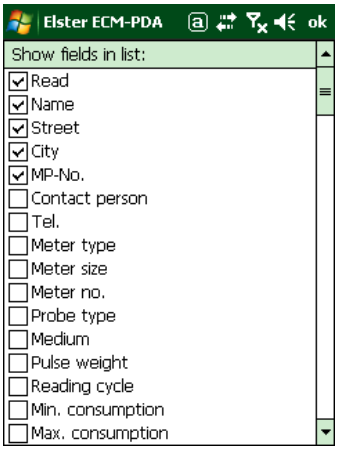


5.5.7 Columns selection

You can select more or less displayed columns in the standard view.

Navigate via the menu “M” → “Options” → “Columns selection”

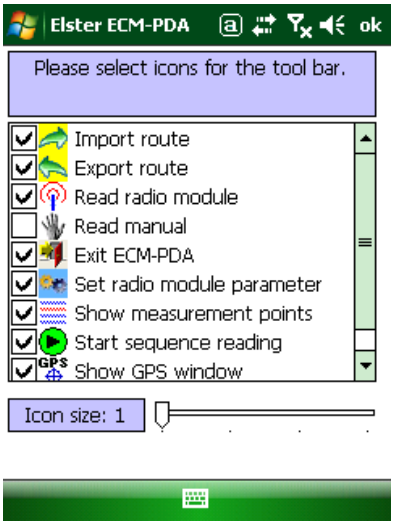
Now you can activate the different measurement point and meter information fields that are already known from ECM Database Module D.



5.5.8 Toolbar

The toolbar on the bottom of the ECM-PDA software can be set up with different icons and functions.

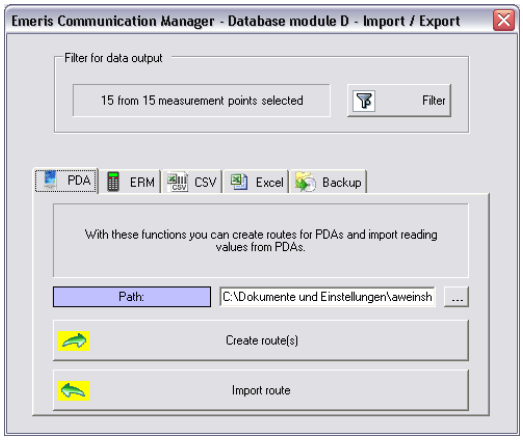
Navigate via the menu “M” → “Options” → “Toolbar”



Activate / deactive you´re often used / less used functions in the toolbar menu.

5.6 Route transfer from ECM Module D to the handheld device

The routes are created and maintained in the data base module D.
Therefore you need to identify the routes in the Module D register „Measurement point“ → „Route no. [Rn]“.
To take up several measuring points to one route, fill in the same value in the field „Route no“ (e.g. “1” or “District 1)
To create the routes click on the right upper Button „Import/Export “in Module D.
Thereupon the following window opens:



The first step is to insert the path of your “My documents” folder from your handheld. Enter the location of the synchronization file, which you selected with the installation of „Active Sync“ or the Mobile Device Center in Windows 7.
E.g. “C:\Users\aweinsheimer\Documents\My documents EMERIS 9900 HHT”

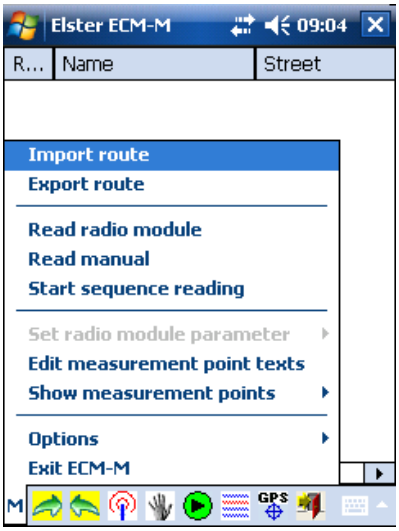
As soon as you entered the path you can press the Button “Create route(s)”.
Thereupon you get a message which routes were created.

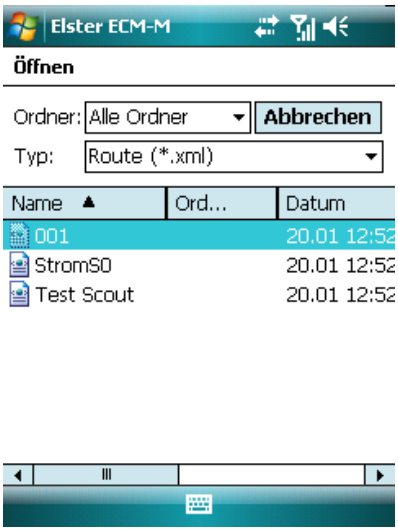
The route file ends always with the designation *.xml and „*“ is replaced by name you entered in the ECM module D field “Route No.”. If you activated the filter function in Module D, you only get the routes of the filtered measurement points.

As soon as you connect the PDA with your PC, Active Sync starts the synchronization of the files and transfers the routes to the PDA. This can take place manually via the Button „Synchronize“ in Active Sync.

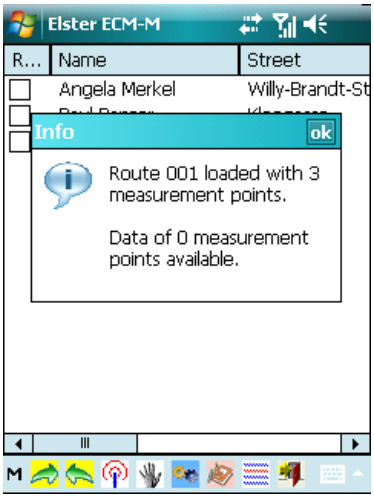
5.7 Initialise and start the read out with the PDA

After transferring the files successfully to the PDA, choose the point „Import routes“ in the menu of the ECM-M software on your PDA or click on the yellow marked arrow, which is directed to the right.





The following window shows you all available routes on the PDA. Select the route you want to load.

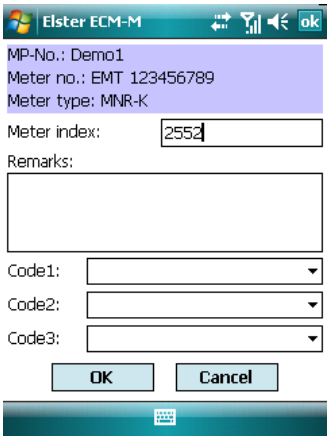


The system confirms you the loading process of your route. Now choose the measurement point you want to read and click on the following sign.

Subsequently you get information of the successful or the inaccurate read out.

5.7.1 Enter meter reading manually

You got the possibility to add measurement points without a radio module to your routes.
The symbol allows you to enter a meter reading fort he chosen metering point. It's also possible to manually enter a meter reading to a radio module equipped meter. This is necessary if the radio module is broken or the battery is empty. The manually entered meter reading is also transferred to the history in module D.
In addition to this, you can select different notes in the fields "Code 1 – 3". And you can enter an individual comment in the "Comments" field.



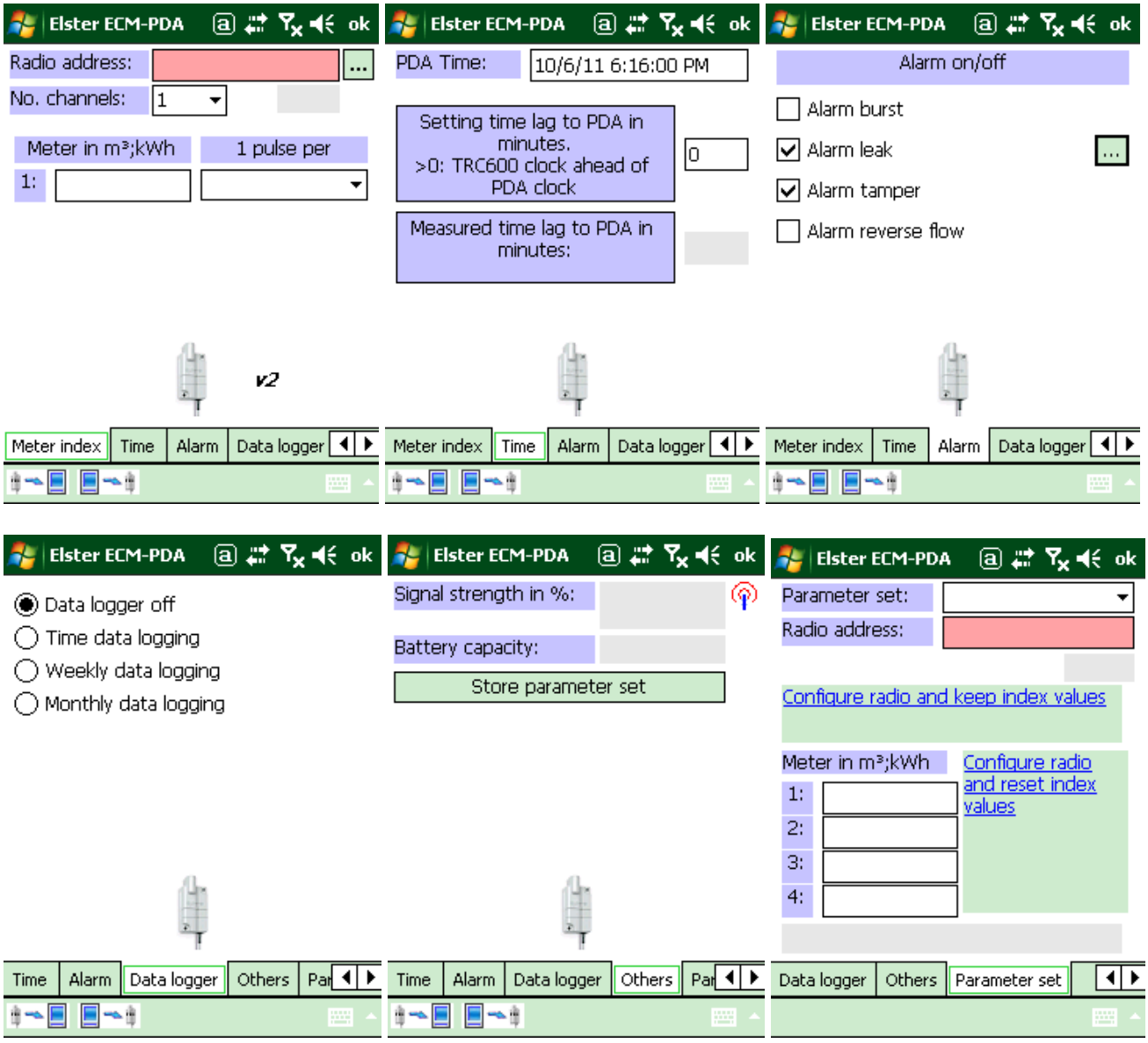
5.7.2 Radio module parameterisation

You can parameterise a radio module by clicking the button after you marked a measurement point in your route. The radio address field is automatically filled out. Next to the pulse rate and the meter reading you also can change all functions, similar to module C. For this use the registers:

- Time
- Alarm
- Data logger
- Others
- Parameter set

In the register „Others" you can see the actual signal strength and the battery capacity (if supported).
To read the values from the radio module press the button .
To write the changed values into the radio module press the button .
Attention:

- When you changed a value in the fields you always need to press the "Write" button to transmit the changes to the radio module / meter
- The pulse value or the meter reading can obviously not be changed at a M200 / M210 meter. All changes made will be without any effect!



Function of the alarms leakage and burst:

When you check the alarm field leak / burst you set the alarm activation parameters via the 3 dots field behind.

You must set 3 values to set up the leakage / burst alarm:

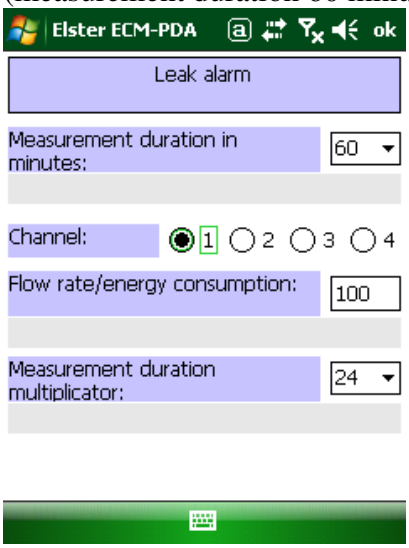
Measurement duration in minutes:	Is the period of time for counting the meter pulses for the calculation of the flow rate.
Flow rate / Energy consumption:	Value in pulses (not m³) for the alarm activation
Measurement duration multiplicator:	Is the time period for alarm activation

If the flow rate is for the <u>whole time</u> above the alarm level, the leak / burst alarm will be activated

For example:

Our meter has a pulse value of 1 litre per pulse.
The measurement duration is 60 minutes, the flow rate is 100 and the multiplicator is 24.

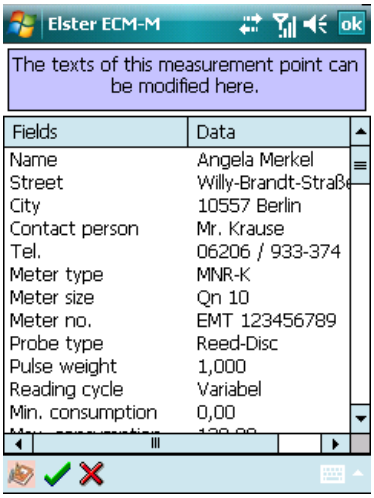
An alarm is activated when our meter consumes more than 100 litres (1 litre * 100) every hour (measurement duration 60 minutes) over 1 day (multiplicator 24).



5.7.3 Edit measurement point texts

You can change all measurement point texts via the button .
Every change you make is transferred to the data base module D with the synchronisation.

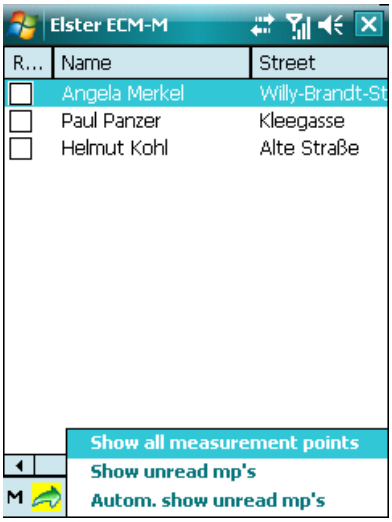
Attention: You only can change text fields if you set the user rights for this function in the configuration in the register “options”.



5.7.4 Visualization during the readout

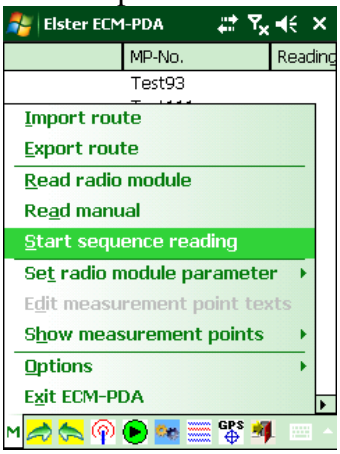
If you load a route with a lot of metering points, you can just show the unread points. First press the button and decide what metering points are shown. You can choose between:

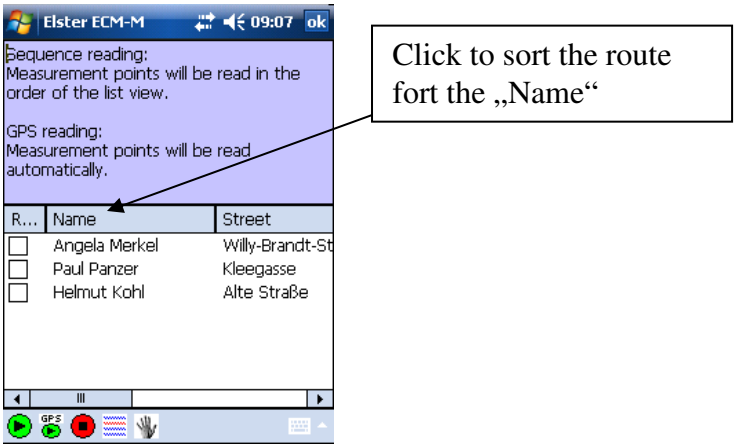
- „Show all measurement points“ → All metering points of the loaded route are shown
- „Show unread mp´s“ → All metering points of the loaded route are shown, that are not read yet.
- „Autom. show unread mp´s“ → Every read metering point is automatically blanked out after the successful meter reading.



5.8 Sequence reading via PDA

To start the sequence reading, import a route and press the button “start sequence reading” in the menu or press the shortcut in the toolbar.





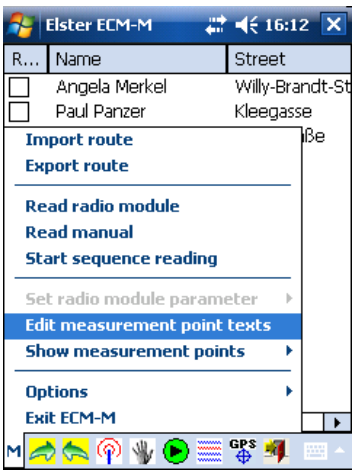
You can then sort the route according to criteria, such as street name, city, radio address, etc. with a click on the sorting criteria The sequence reading starts always with the first measurement point and works automatically downwards when you press .You can use the different buttons at the bottom of the screen also during the read out to show unread mp´s only.The red "Stop" button, aborts the reading.

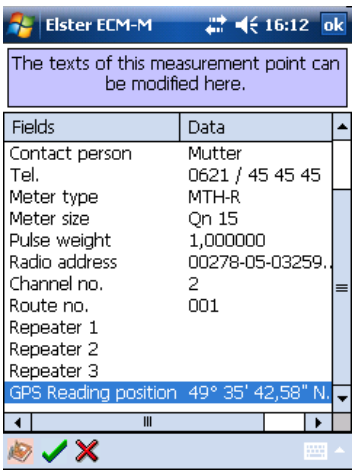
5.9 Sequence reading with GPS via PDA

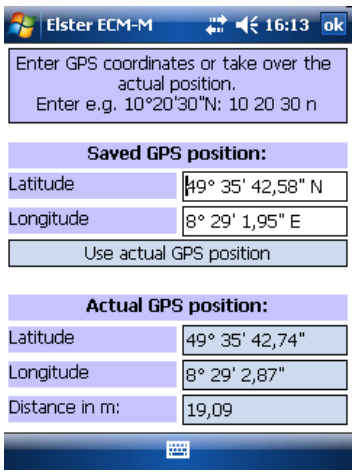
Attention:

- You can only use the GPS sequence reading when you're Handheld has an integrated GPS chip and when you enabled your GPS sensor according to step "3.1.4 GPS"
- To start the GPS based sequence reading be sure that you entered the GPS coordinates for the measurement points in Module D (see manual for ECM module D). You can also use the GPS reading when you read out the measurement points one time before and activated as described in chapter "3.1.4 GPS" the "Take GPS reading position when reading" feature.

If you have not done one of the both steps yet, you can set the coordinates of the measurement point on the Handheld:
First, import your route. Then be sure that you have set the appropriate rights to edit the measurement point texts.
Click in the menu "Edit measurement texts". Then choose the "GPS readout position" and click on the edit box on the left below. Once your GPS sensor indicates your current position you can confirm it by clicking the button "Use actual GPS position". Then click above on "OK" and then confirm the change on the green arrow at the bottom line.

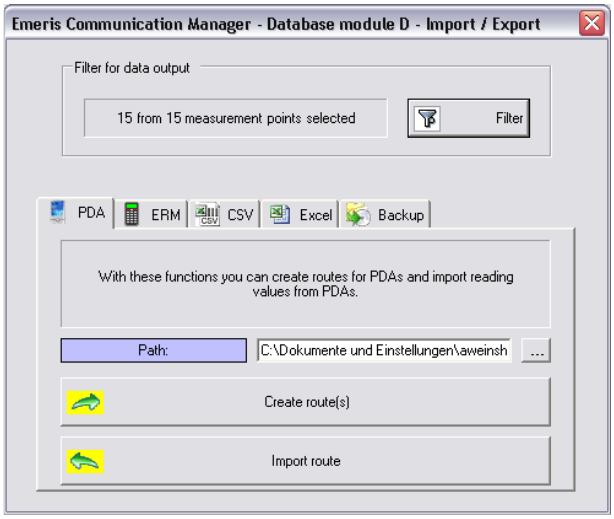




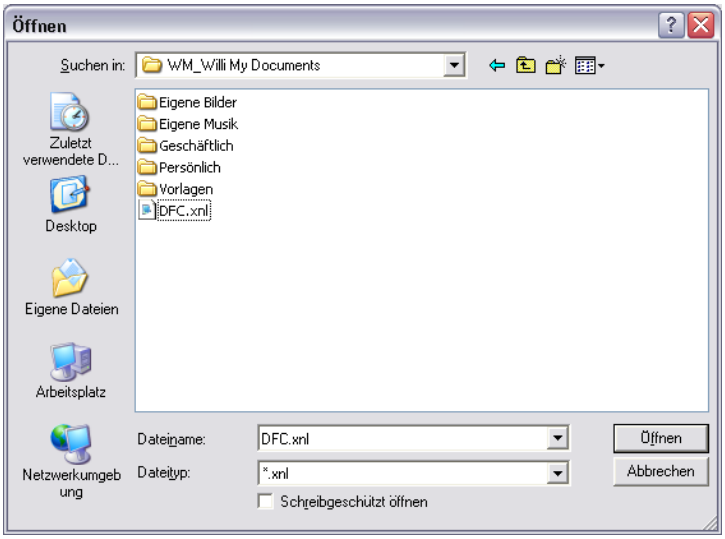


5.10 Transfer of completed routes back in the EMERIS Communication Manager

After the radio modules were read out, the PDA can be attached to the PC. Active Sync then copies the appropriate route files (*.xnl) into the master directory on the PC. After the synchronization has finished, select in module D the „Import/Export“ button and then the button „Import route“.



The *.xnl route data file can be chosen in the following window.



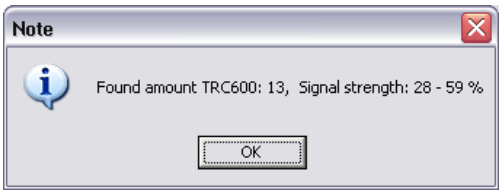
The successful import of the route data is confirmed.

6 Parameterization of the radio module / Initiating before mounting

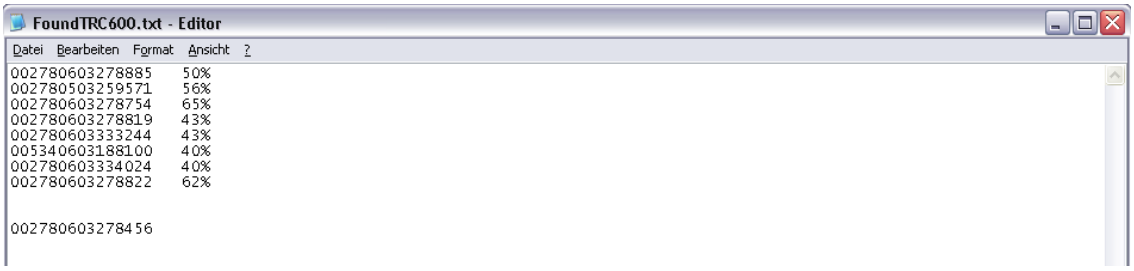
In this chapter it is described how to parameterise a larger number of radio modules in the simplest and fastest way and how to add them to the data base.
For a smooth operational sequence you should have the radio modules right next to you. It does not matter whether the modules are connected with a meter or not.

6.1.1 Insert radio module addresses in Module C

The more radio modules are used, the more time-consuming it is to add the radio module list in module C.
First it must be examined whether all radio modules are in range. Subsequently, the Button “Search Radio Modules” can be pressed.



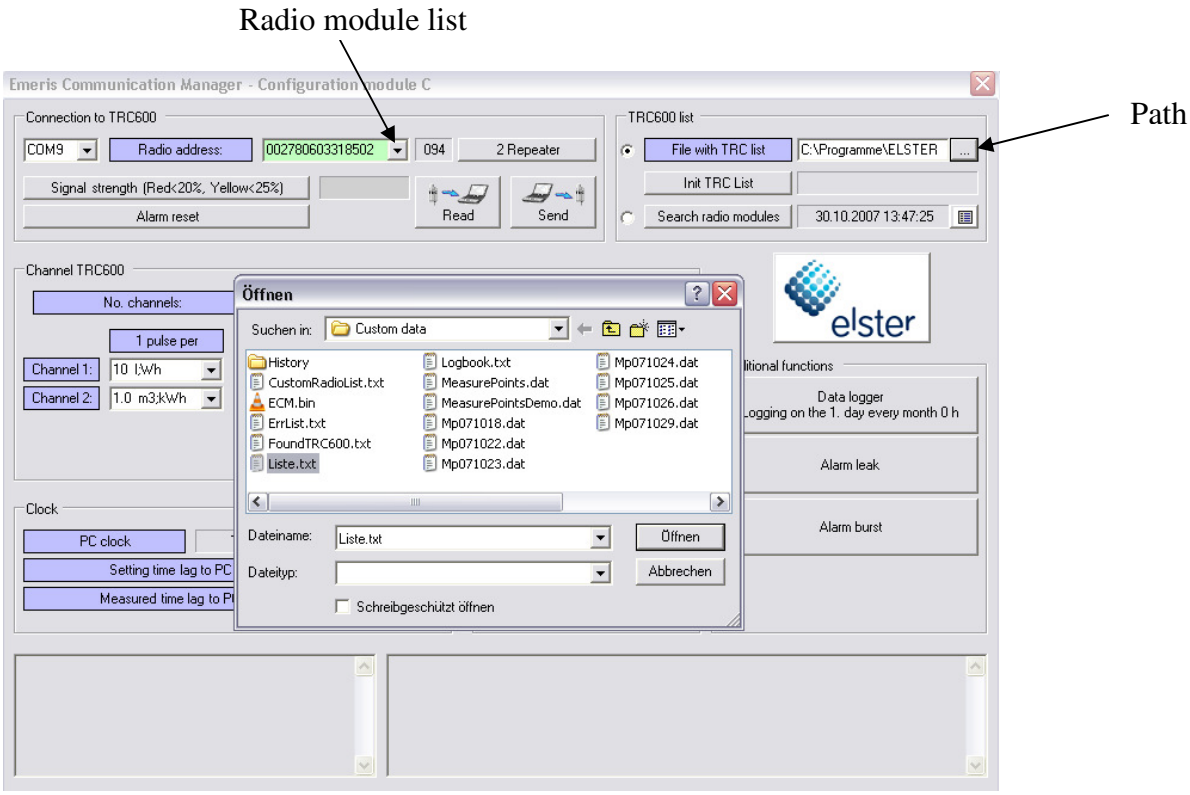
In a new window the number of found radio modules and receipt strengths appears.
If the program was installed in the standard file, you now find under the indication of path,
C:\Programme\ELSTER Messtechnik GmbH\ECM\Custom data
the txt file: „FoundTRC600.txt “
After opening the file you see a window like the following:



The missing addresses of the not recognized radio modules can be written simply into a new line. The receipt strength does not have to be entered. Confirm after input of the address with „Return“ and enter the next address.

Note: It is also possible to use a bar code scanner, to scan the radio module addresses and add them in such easy way to the list. This procedure is recommended starting from a larger number of radio modules.
In connection with the ELSTER ConText® meters you also can scan the meter number in!

In the next step you need to save the file as a new name. The new name and the new memory place are selectable. But it is important that the file name is not equal to „FoundTRC600 “and the file format remains *.txt.
Subsequently, you close the Txt file and return to the module C of the ECM software.
Via the Button „Path“ you select the former saved Txt file. Then press „Öffnen“ and the list is loaded into Module C.

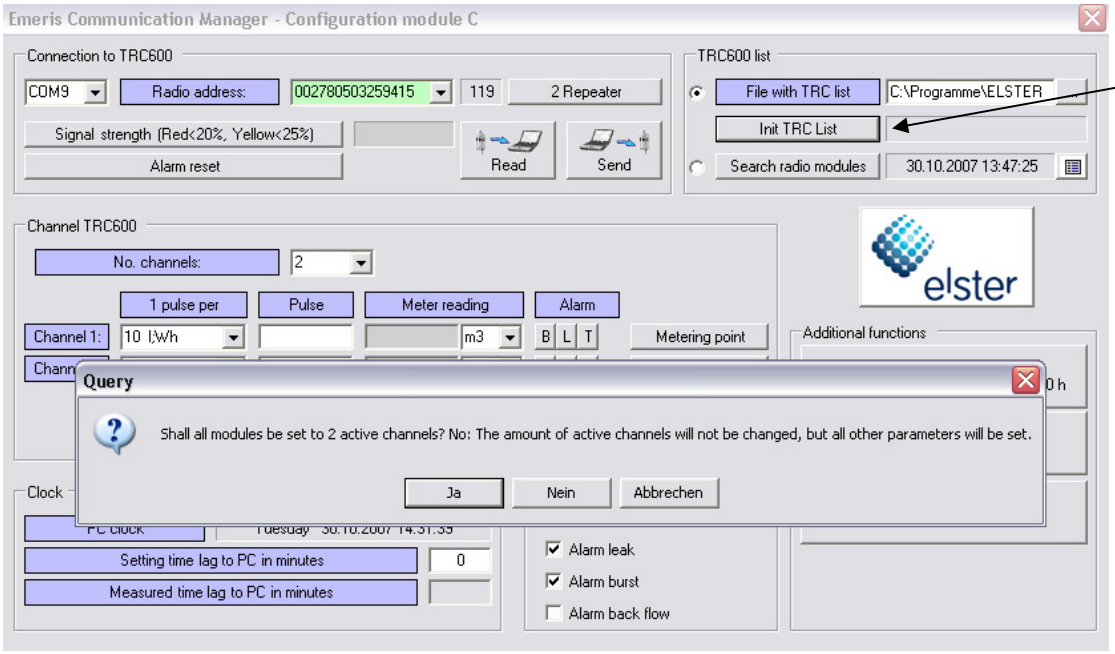


Afterwards, the addresses can be selected over the selection field „Radio module list“.
It can be helpful to create different Txt files for the different radio module types. Thus we recommend providing a list with all radio module addresses deposited in and additionally other lists, for 1-Channel, 2-Channel and 4-Channel modules. In many cases together with the radio modules also new meters are installed, so that usually the pulse rate and the meter reading are equal. To save time it is possible to parameterise a large number of radio modules in one step.

6.1.2 Parameterization of all radio modules in one step

When the list with radio modules is merged in module C, it is possible to make all necessary settings, such as number of channels, pulse rate, Data logger function, which are valid for all radio modules from this list with one click.

In order to send the changes to the radio module in the list, press the Button „INIT TRC list“.

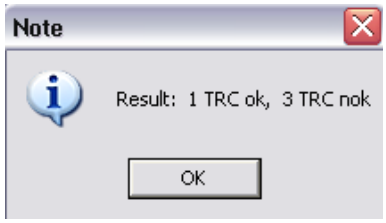


A reference field appear. By click on „Ja / Yes“, all the changes you adjusted in module C will apply for all radio modules in the list. If you select „Nein / No“, all parameters, except the number of channels, are programmed on the radio modules in the list.

The reference display window that appears after every successful parameterisation can be confirmed by a click on „OK“. This message appears only, if still no data base entry exists to the radio module.

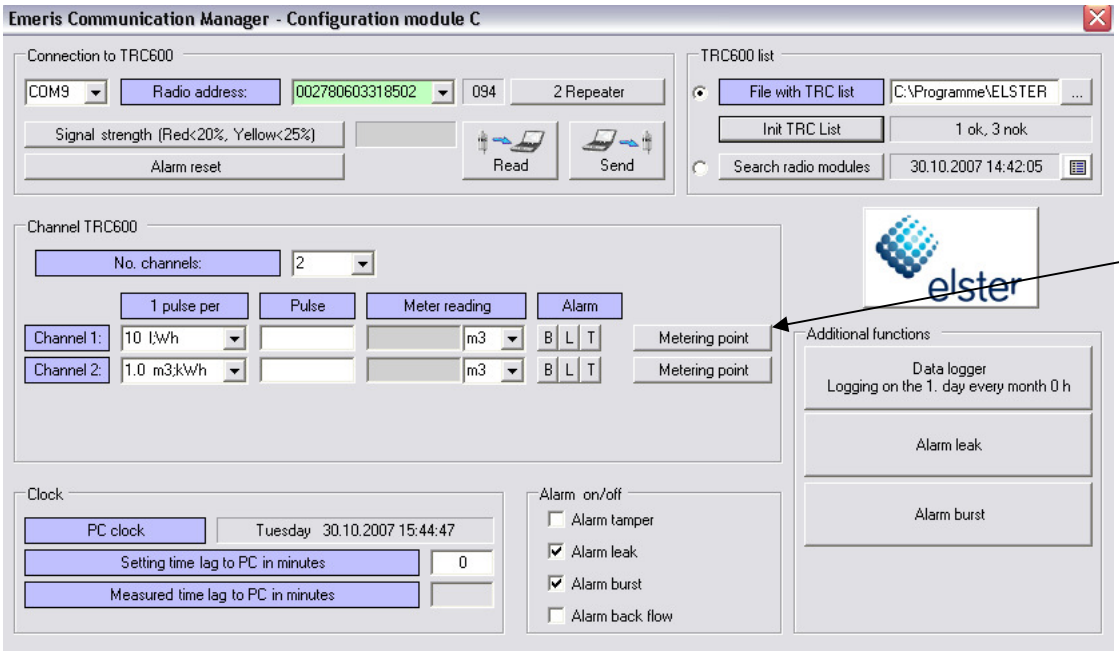
The “Status” text field informs about the current progress of the reprogramming. „Ok“means a successful programming of the radio module and „nok “a missed programming.

After the successful parameterisation a reference display window appears.

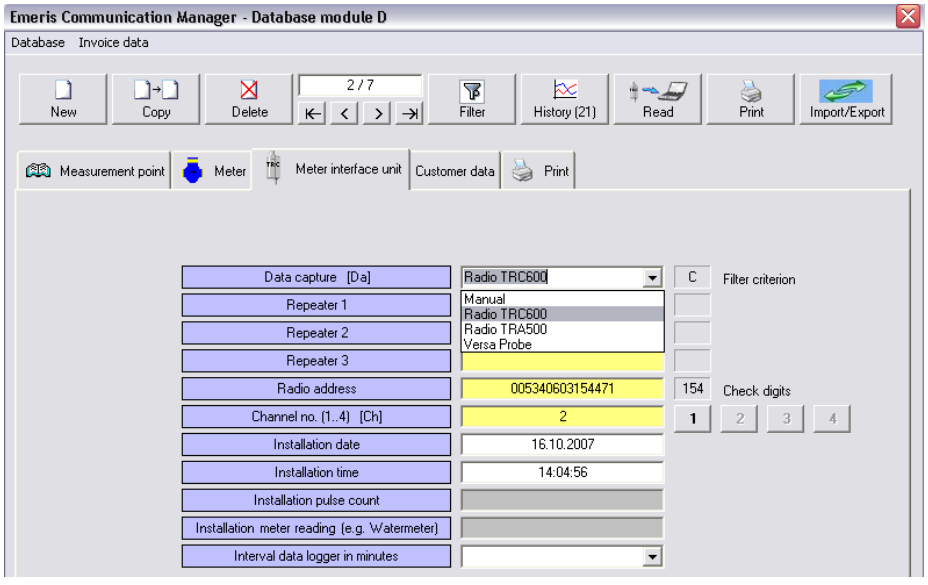


6.1.3 Create data base entry with radio module reference

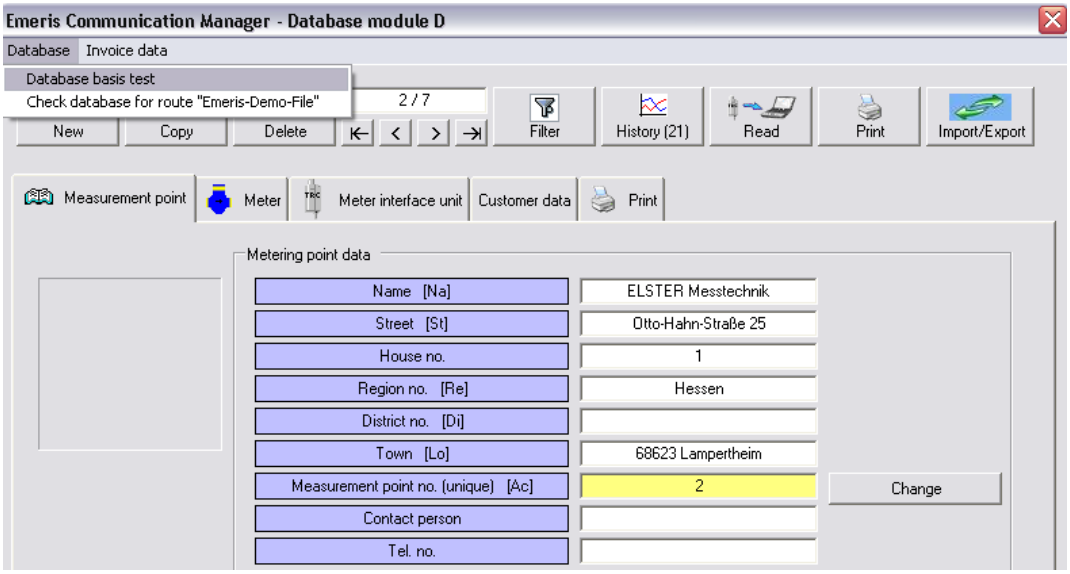
Now, that the radio modules are parameterised, directly open module D via the Button „Metering Point". Click for example on „Metering point" at channel 1, then the appropriate data record in module D is opened. Is the actual radio module not connected to a data base entry, the software automatically generates a new entry.



The advantage of this function is, that under the register „Meter interface unit" the "Data capture" selection field must just be set to „Radio TRC600" and the information like radio address, Channel No., installation date and installation time is automatically filled out. Also the pulse rate under the register "Meter" is imported from Module C.



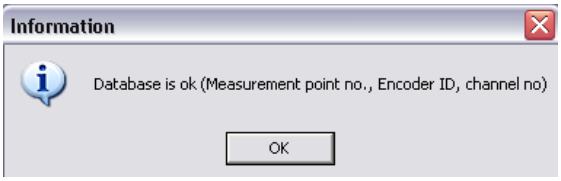
Note: In all 4 registers (Measurement point, Meter, Meter interface unit and Customer data) the yellow deposited obligation fields must be filled out. This is valid in particular for the entry „Measurement point No." under the register „Measurement point"!



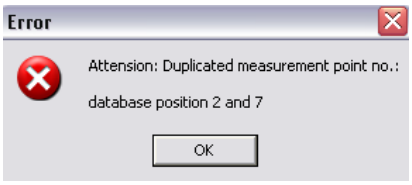
Concluding, the data base can be examined for plausibility over the entry Database → „Database basis test“

This function examines the entries Measurement point No., Radio address and Channel No. for clarity. An information window announces the plausibility of the data base
or indicates the wrong entries.

Correct



False



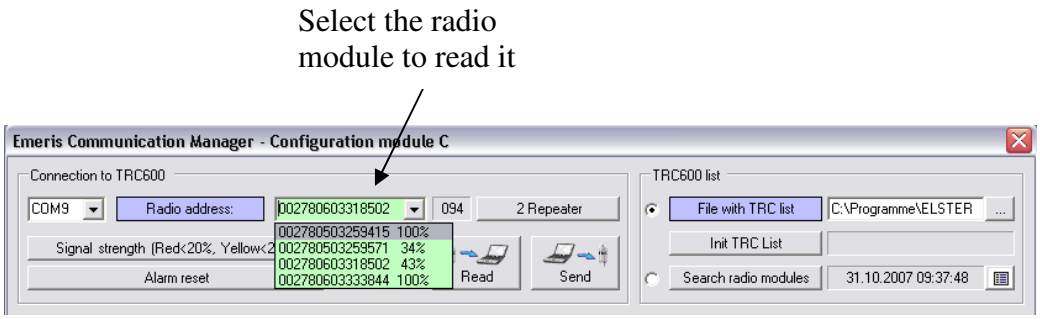
6.1.4 Local radio module read out

Now, that all measuring points in the data base are added and the radio modules are parameterised on the respective attached meter, the radio modules can be picked out now.
If you now read out, you receive on the one hand the current meter reading, if the data logger function is activated, it is also read out and on the other hand you get information of released alarms.

There are 3 possibilities to read out the radio modules at the measuring point.

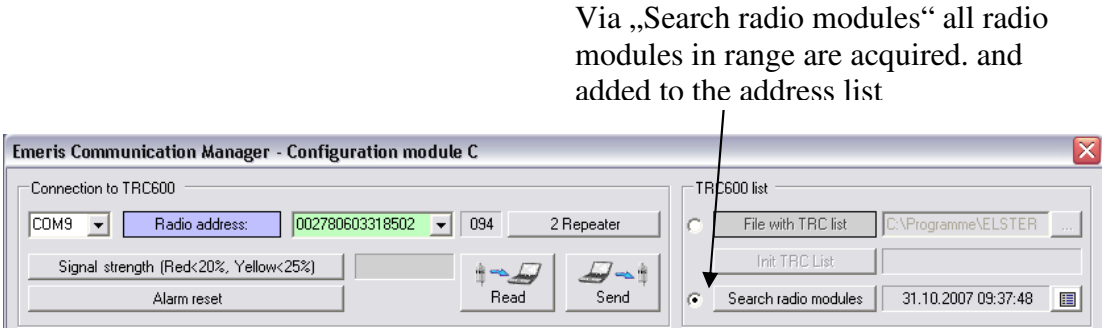
1. Possibility via module C:

If the Txt file with the radio module addresses is selected, the radio address of the actual measurement point can be chosen. Afterwards press the Button „Read“. All channels of the radio module are read out and stored in the associated data base entries.



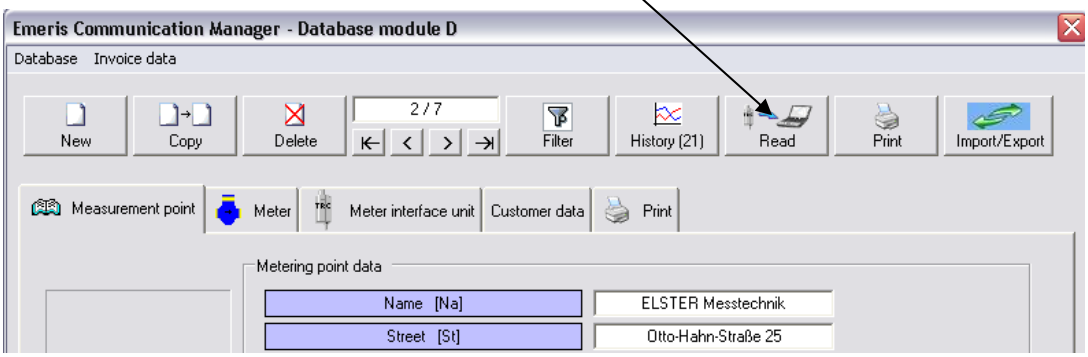
2. Possibility via module C:

If the radio module address is not well-known or if several radio modules are in range, the modules can be found by pressing the Button „Search radio modules”. Subsequently, the modules can be chosen in the selection field. By pressing the button “Read” all channels of the radio module are read out. Repeat this for every module in the list.
After the last module the point at „File with TRC list“ can be set again. There again the radio module addresses of the selected Txt file are back in the selection list.



3. Possibility via module D:

In module D the measuring point in the data base, which can be read out, can be selected. Subsequently, you press the Button „Read“ and the radio module address is automatically inserted in Module C.



Now you only need to press a second time the Button “Read” in Module C and all channels of the radio module are read out and automatically stored in the database.